



FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative



FEED THE FUTURE CAMBODIA HARVEST II FINAL REPORT 2017–2022



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With iDE and EMC

FEED THE FUTURE CAMBODIA HARVEST II

FINAL REPORT

2017–2022

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ACRONYMS

AC	Agricultural Cooperative
AGID	Angkor Green Investment and Development
AIMS	Accelerating Inclusive Markets for Smallholders
ASSIST	Asia Society for Social Improvement and Sustainable Transformation
BMP	Business Management Platform
CAC	Cashew nut Association of Cambodia
CACA	Cambodia Agricultural Cooperative Alliance
CACC	Cambodian Agriculture Cooperative Corporation
CamGAP	Cambodian Good Agricultural Practices
CFMA	Cambodia Food Manufacture Association
CMA	Cambodia Microfinance Association
COR	Contracting Officer's Representative
CP	Commercial Partnerships
CPSF	Cambodia Pepper and Spices Federation
CSC	Chey Sambo Cashew Nut Processing Handicraft
DAI	Department of Agro-Industry
DPPSPS	Department of Plant Protection, Sanitary and Phyto-Sanitary
EMMP	Environmental Mitigation and Monitoring Plan
ERP	Enterprise Resource Planning
EWS	East-West Seed
FAO	Food and Agriculture Organization
FTE	Full-Time Equivalent
FY	Fiscal Year
GDA	General Directorate of Agriculture
GMP	Good Manufacturing Practices
HACCP	Hazard Analysis and Critical Control Point
HCST	Handcrafted Cashew Nut Stung Treng
IEE	Initial Environmental Examination
IFOAM	International Federation of Organic Agriculture Movements
IPM	Integrated Pest Management
ISO	International Organization for Standardization
KIA	Key Intervention Area
MAFF	Ministry of Agriculture, Forestry and Fisheries
MFI	Microfinance Institution
MoC	Ministry of Commerce
MoU	Memorandum of Understanding
MSME	Micro, Small and Medium Enterprise
NAV	Natural Agriculture Village
NCBA CLUSA	National Cooperative Business Association CLUSA International
NGO	Nongovernmental Organization
PDAFF	Provincial Department of Agriculture, Forestry and Fisheries
PERSUAP	Pesticide Evaluation Report and Safe Use Action Plan
PGS	Participatory Guarantee System

POS	Point of Sale
SCF	Supply Chain Financing
SME	Small and Medium Enterprise
USAID	United States Agency for International Development
USG	United States Government
ZOI	Zone of Influence

HARVEST II PRIVATE-SECTOR PARTNERS

No	Name	Business
1	Angkor Green Investment and Development (AGID)	Input supply company
2	AgriOn	Safe vegetable/fruit wholesaler and retailer
3	Aliments	Safe vegetable/fruit wholesaler and retailer
4	Ample Agro Product	Cashew processing company
5	Azaylla	Safe vegetable/fruit wholesaler and distributor
6	LOLC, AMRET, AMK, Chamroeun, Hatha Kasikor	Microfinance institutions (MFIs)
7	Confirel	Food processing company
8	CPSF	Association of pepper and spice companies
9	CSC	Cashew processing company
10	CSL Enterprise	Food processing enterprise
11	East-West Seed (EWS)	Input supply company
12	Generation One Trading and Logistics	Service provider for logistics and export
13	Green Farmer AC	Fresh vegetable and spice processing agricultural cooperative (AC)
14	Grove Fruit Grower	Mango commercial farm and exporter
15	Growway Partner	Business service provider (finance, market, technology, and network)
16	Handcrafted Cashew Nut Stung Treng (HCST)	Cashew processing company
17	Kamya AgriTrade	Organic cashew processing company
18	KCCV Plantation	Mango and longan processing company
19	Kenko Shoku	Commercial farm and safe vegetable/fruit distributor through delivery facilitated by mobile application (app)
20	KiU	Business management platform
21	Laey Baitong	Safe vegetable/fruit retail market
22	Misota	Food processing company
23	NAV	Safe vegetable/fruit wholesaler and retail market
24	Navita Food Production	Fruit processing enterprise
25	New Idea Enterprise	Fruit processing enterprise
26	Ponlei Thamacheat	Local natural and organic products
27	Ponleu Pichenda AC	Longan and vegetable agricultural cooperative
28	RichFarm	Mango commercial farm, processor, and exporter
29	SHE Agrocarn	Marketing and distribution company
30	Snadai Me	Food processor and retail market
31	Song Muoy	Input service provider
32	ST Crop Agri-Science	Input supply company
33	Tasey AC	Safe vegetable supplier and nethouse builder
34	Veha Juice	Food processing company
35	VT Grow	Input supply company
36	Yamato Green	Safe vegetable and greenhouse technology service provider

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Abt Associates is grateful for the insights, ingenuity, hard work, and adaptability of all who have made possible the accomplishments described in this report.

We appreciate the hundreds of market actors—buyers, producers, ACs, financial institutions, and service providers—who were willing to speak with us about their aspirations and work with us on new approaches. You took risks to test out new practices and business models. You formed new connections to develop new products for new markets. You created new value in the market system.

Government officials at the provincial and national level supported the spread of Cambodian Good Agricultural Practices (CamGAP) and advanced helpful policies, plans, *prakas* (proclamations), and guidelines. We are grateful for your collaboration, including all of you from the Provincial Departments of Agriculture, Forestry and Fisheries; Ministry of Agriculture, Forestry and Fisheries; and Ministry of Commerce.

Our subcontractors iDE and EMC agreed to join our team six years ago and have been freely sharing their knowledge ever since. Your talent and expertise expanded the project's impact.

We are also so pleased to have worked with the more than 50 Harvest II staff members who came together over the years to shape this project. You established the relationships with our partners that created benefits for thousands of producers. Together, we accomplished and exceeded our goals because you learned and adapted, because you wanted to do good and useful work, and because you kept focused on results.

Finally, we thank USAID/Cambodia for entrusting us with implementation of Harvest II and for their demanding yet supportive supervision. It took a large team at USAID to support this project, including our Contracting Officer's Representative (COR) Vuthy Theng and Alternate COR Sam Oeurn Ke. You and your many colleagues shared the journey with us.

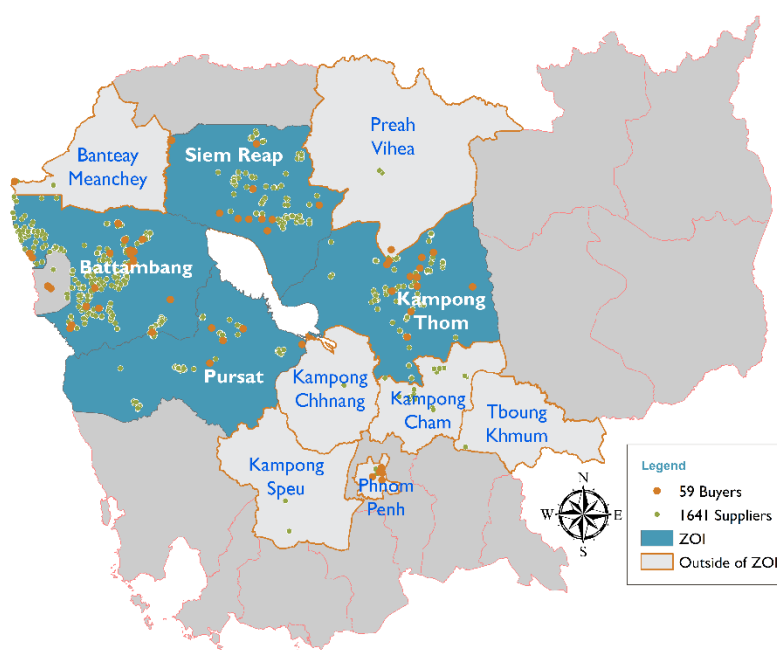
EXECUTIVE SUMMARY

Feed the Future Cambodia Harvest II (“Harvest II”) was the flagship project in USAID/Cambodia’s Office of Sustainable Economic Growth from April 18, 2017, to July 17, 2022. This report looks back at Harvest II’s life-of-project accomplishments. It provides an overall description of the project’s interventions, reports on performance in meeting targets and achieving expected results, and reflects on the significance of its efforts in attaining the project’s objectives.

BACKGROUND

The purpose of Harvest II was to increase sustainable economic opportunities in the horticulture sector by increasing value chain competitiveness and removing obstacles to market access. Harvest II worked to spur growth of the horticulture sector, with particular emphasis on four subsectors: vegetables, mango, longan, and cashew.

The project worked across the provinces of Pursat, Battambang, Siem Reap, and Kampong Thom, and other provinces as approved on a case-by-case basis. The Zone of Influence (ZOI) is shaded in the map above.



COLLABORATING, LEARNING, AND ADAPTING

Harvest II operated at a time of accelerating change in the horticulture market system, with numerous market disruptions introduced by Covid-19 in its final two years. In 2017, the project was the first in USAID’s portfolio to approach the agriculture sector from a demand-driven orientation rather than a production-orientation. Some were skeptical about this approach in the beginning, including some Harvest II staff. But the team was open to learning and its collaborating, learning, and adapting (CLA) philosophy enabled it to continuously learn and adjust its approach as needed.

By the end of the project, a major shift had occurred in both partners’ and staff members’ understanding of the market system and the potential for creating value through improved collaboration. As one staff member said, “At first, I worried that we were abandoning farmers by taking a buyer-led approach. I thought that buyers were the ones who made the most money and took advantage of farmers. But when I started working closely with buyers, I learned that they have many constraints to overcome and take many risks as well. Now, I see that working through the private sector can definitely be in the farmers’ interest. And it’s a sustainable way of helping farmers because the private sector will always be here, even after development projects are gone.”

Looking back, we see that the project went through three main phases, each with its own contributions to accelerated growth and system strengthening:

- **Year 1.** In 2017, limited contact between producers and buyers hindered collaboration to meet market demand and impeded communication with other market actors to access needed services. Using our buyer-led approach, Harvest II focused on buyers as the primary entry point to the market system and helped them work more closely with producers so that each could adjust to the other's needs. Both buyers and producers appreciated Harvest II's facilitation and were able to achieve mutually beneficial goals. These "commercial partnerships" sometimes also involved input suppliers or financial institutions.
- **Years 2 and 3.** As connections between these "commercial partners" led to improved practices and increased sales, Harvest II broadened its approach to incorporate more systems thinking. The resultant buyer-led, market systems approach enabled Harvest II to both retain its demand-driven orientation and think more systemically about key market opportunities and constraints in four main subsectors (vegetables, mango, longan, and cashew). It identified the desired system-level changes that would better enable market actors to capture the most promising opportunities and selected its interventions to support market actors in advancing those changes. This approach enabled the project to more intentionally gear its technical assistance and grants to support system-level change. During this period, Harvest II also extended its geographical reach to include some innovative companies outside the project's original ZOI.
- **Years 4 and 5.** The final period of the project, encompassing Years 4 and 5, coincided with the COVID-19 pandemic, which created significant disruptions in the Cambodian economy. While many horticulture market actors encountered serious setbacks, the economic disruptions also led to an explosion of innovation. Beginning halfway through Year 4, USAID provided additional funds to the project through the COVID-19 Response Program, which allowed Harvest II to boost its technical assistance and grants during this period of rapid change. The project continued to prioritize work with innovators who were creating solutions to both achieve their own commercial objectives and advance system-level strengthening. Many partners made significant progress despite the pandemic; several made impressive breakthroughs. More broadly, market actors are now more interconnected and regularly collaborate to boost their competitiveness, creating more value in the market system.

PERFORMANCE IN MEETING TARGETS; KEY RESULTS

Harvest II met or exceeded all its life-of-project targets, as detailed in Annex A. The primary drivers of economic growth—measured by combined sales at farms and firms, new private-sector investment, and jobs—exceeded its life-of-project targets by 78 percent, 113 percent, and 26 percent respectively.



Harvest II had three interconnected sub-purposes: to improve capacities for market participation, market linkages, governance, and the enabling environment. Key results for each sub-purpose are shown below.

Sub-Purpose 1: Improved Capacities for Market Participation

- 778 private-sector actors adopted improved supply chain management practices.
- 8,686 farmers adopted improved agricultural practices.
- 1,105 farmers and small and medium enterprises (SMEs) completed a variety of certification requirements.

- 2,969 farmers and SMEs adopted at least one climate-smart agriculture practice.

Sub-Purpose 2: Improved Market Linkages

- 1,641 farmers made \$50,197,423 in combined incremental sales.
- 1,700 firms and farms within 59 commercial partnerships made \$74,834,003 in combined sales.
- 81 firms (34 grantees and 47 commercial-partnership buyers) made \$27,961,555 in new investment, including \$3,372,118 of investment mobilized for sustainable landscapes.
- 63 grantees were awarded performance-based grants with a potential value of \$4,519,682.
- Grantees earned over three quarters of potential milestone payments, resulting in \$3,321,127 in grants disbursed.

Sub-Purpose 3: Improved Governance and Enabling Environment

- Government counterparts from the Department of Agro-Industry (DAI), General Directorate of Agriculture (GDA)/Ministry of Agriculture, Forestry and Fisheries (MAFF), and the Ministry of Commerce (MoC) partnered with private-sector representatives and subject-matter experts to advance 17 policy initiatives through various stages of the policy process—17 analyses were completed, 16 public consultations were conducted, and 16 documents were drafted or revised, of which 2 were endorsed with the remainder in process.

Grants

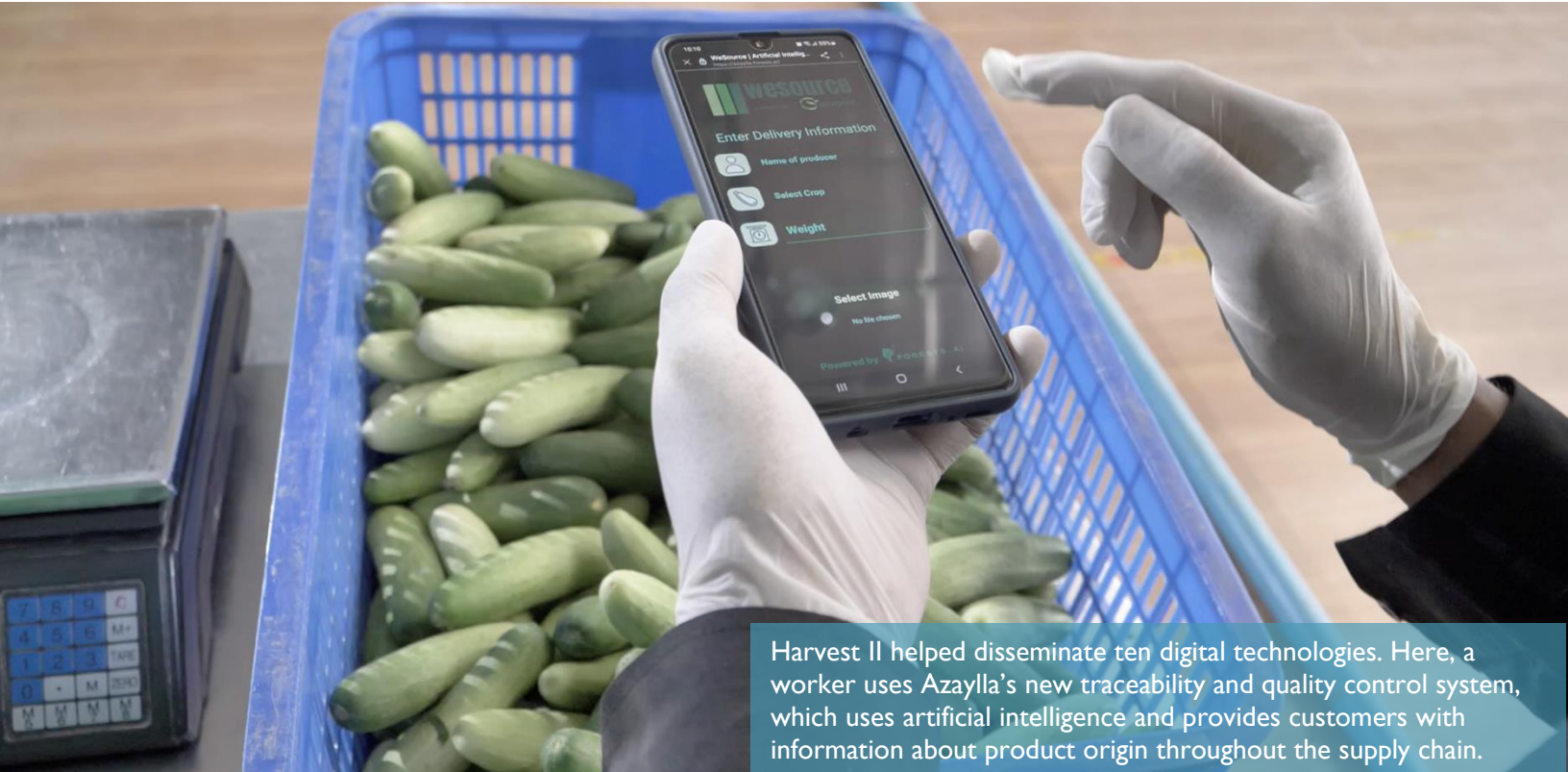
The Harvest II grants program cut across all three sub-purposes and contributed to the above results. All grants were milestone based, usually laying out a plan of work covering about one year and specifying expected results such as increased sales, investment, and jobs. The project awarded 63 grants, and grantees successfully completed milestones leading to \$3,321,127 disbursed. In addition to increased sales, investment, and jobs, grantee achievements include registration of 140 new products, dissemination of nethouse technology and other climate-smart technologies, and expansion of various digital technologies. Of the 55 unique companies receiving grants, 17 companies (31 percent) were led by women or youth.

SIGNIFICANCE OF THE PROJECT

When Harvest II was launched in 2017, many market actors in the project's targeted provinces were unaware of, or uncertain about, opportunities for growth in the horticulture sector. They were also unprepared to meet market requirements. Over the last five years, Harvest II's interventions achieved three significant developments in the horticulture market system:

- First, **supply chains have become more competitive and efficient.** Buyers are investing in their supply networks by providing producers with training, technical, and financial assistance as well as access to a more secure market.
- Second, **strengthened supply chains have given rise to more differentiated and value-added products.** Increased business profitability enables processors to invest in factories and machinery while providing support to their suppliers.
- Third, new and more competitively produced products are enabling agribusinesses' **expansion into new markets, both in Cambodia and internationally.**

As the project comes to a close, market actors are more interconnected, are better prepared, and are capably providing a more diverse product mix to a more diverse set of markets within and outside Cambodia. Harvest II partners now supply modern retail outlets with high-quality fruits, vegetables, and processed products that adhere to strict quality assurance standards. As a result of these developments, on- and off-farm incomes for participants have increased and become more predictable, and prospects for market expansion are growing.



Harvest II helped disseminate ten digital technologies. Here, a worker uses Azaylla's new traceability and quality control system, which uses artificial intelligence and provides customers with information about product origin throughout the supply chain.

I. SUB-PURPOSE I: IMPROVED CAPACITIES FOR MARKET PARTICIPATION

Harvest II built the capacity of market actors—including producers, buyers, processors, and potential business partners—to successfully engage in the market system. Over the past five years, Harvest II provided training and advice on financial and business management to various actors, helped them increase their access to market and production information, and helped them improve supply chain efficiency and value addition. In the past two years and in response to challenges related to COVID-19, Harvest II implemented new strategies in working with these partners to find new opportunities by developing new products and expanding to new markets. Over the past five years, Harvest II helped 778 unique companies improve business skills and supply chain management practices. These improvements allowed the companies to create more value (e.g., the development of 140 new products) and helped the companies access \$7,196,821 in financing. This section presents the project's accomplishments according to Key Intervention Area (KIA).

KIA I.1 FINANCIAL AND BUSINESS SKILLS IMPROVED

- Improved business skills of various market actors.** Harvest II designed and conducted “Know Your Market” trainings and provided technical support on business management practices for more than 2,000 private firms, including 234 agro-input retailers and agricultural cooperatives (ACs) in and outside of the Harvest II ZOI. Firms received follow-up assistance in business skills and financial management and record keeping. The trainings and technical assistance increased buyers', collectors', retailers' and ACs' understanding of the importance of enhanced record keeping, shop displays, and better marketing of their products and service to clients. With this support, 778 firms adopted improved business practices and qualified for financing, both for increased capital investment and working capital.
- Improved market actors' financial skills and loan management.** The microfinance institutions (MFIs) Amret and LOLC offered financial and consulting services to two ACs in Kampong Thom and Battambang provinces. LOLC also conducted financial literacy and business skills trainings for 120 mango, cashew, and cabbage growers in these provinces, covering topics such as loan readiness and preparation and introducing the MFI's lending facilities. Over the past

five years, Harvest II helped 503 firms and producers access formal loans through a dozen financial institutions.

- **Improved business management through an enterprise resource planning platform.** Banhji conducted financial literacy training for 29 micro, small, and medium enterprises (MSMEs) and registered 86 MSMEs for Banhji's financial software to provide a one-year financial statement report. Following the training, Pichenda AC started using Banhji's financial system to improve the efficiency of its business operations. Additionally, KiU provided virtual and in-person training on its enterprise resource planning (ERP) platform to 564 participants during the grant period. With coaching, 100 micro-merchants and farmers signed up for KiU's point of sale (POS) platform. With Harvest II grant support, business capacity building, and technical assistance, the project helped 1,236 (or half of the firms that adopted improved practices) increase their sales and profits.

KIA 1.2 ACCESS TO MARKET INFORMATION INCREASED; PRODUCTION AND SUPPLY CHAIN MANAGEMENT PRACTICES IMPROVED

- **Promoted the development of a smartphone application to provide farmers with agronomic and market information.** With a grant from Harvest II, AMK Microfinance Institution designed and rolled out Tonlesap App, a mobile phone application (app) to help expand farmers' access to accurate agronomic and market information. With Harvest II's grant support, AMK helped more than 1,000 farmers register on the app, and 237 farmers adopted improved production practice as a result of the agronomy assistance they obtained through the app. Based on the success of AMK's app for farmers and agri-input retailers, AMK developed a new app, Tonlesap Seller App, which helped sellers and service providers in the agriculture sector manage sales, receive orders, and advertise their products.
- **Increased access to technical assistance and supported the improvement of product quality standards.** Harvest II collaborated with grantees, input suppliers, and other service providers to build the capacity of producers through trainings, demonstrations, and follow-up coaching. Through grants and linkage support, Harvest II helped partners reach 8,686 farmers, 80 percent of whom adopted innovative technologies and improved production and post-harvest practices. As a result, farmers increased sales by a combined total of over \$50 million and reached additional markets.
- **Improved environmentally smart production technologies.** Harvest II supported a number of partners, such as Tasey AC, to expand production of safe vegetables and provision of nethouse establishment services. Tasey AC constructed 260 nethouses and now sources vegetables from 187 of them. In addition, Harvest II facilitated a connection between Tasey AC to Pichenda AC that resulted in Tasey AC building 84 nethouses for Pichenda AC. Other safe vegetable suppliers—such as Aliments, Kenko Shoku, and Green Farmer AC—also built nethouses to produce safe and high-quality vegetables for their own shops and/or other premium markets. The project also supported input providers, Pteah Baitong and WaterMech, in modifying imported solar pumps for use in Cambodia and introducing the pumps to farmers using an affordable credit scheme, leading to \$100,000 in orders.
- **Supported product quality certifications to capture opportunities in premium markets.**
 - Harvest II engaged a consultant to provide training on food safety management standards to three cashew processors. As a result, Handcrafted Cashew Nut Stung Treng has applied for Good Manufacturing Practices (GMP) and Hazard Analysis and Critical Control Point (HACCP) certifications from Guardian Independent Certification, while two other processors, Stoeng Trang Cashew Processing and Luxury Cashew Processing, are working to renovate their factories to comply with the standards. In addition, Ample Agro Product

- submitted certification applications for GMP, HACCP, International Organization for Standardization (ISO) 22000, and organic standards for its processing factory.
- Harvest II connected consulting firm **Technola** with four processors—Veha Juice, CSL Enterprise, Misota, and Confirel—to support their ISO, HACCP, and GMP application processes. As a result, the four processors successfully applied and received certifications. Harvest II organized a certificate award ceremony to recognize their achievements in becoming more competitive in both domestic and export markets.
 - Harvest II worked with the **Cambodia Food Manufacture Association (CFMA)** to support eight processing firms—Veha, Navita, CSL, SKOPA, Horyma, Thubo Agrifood, Phoreseen, and YBT—to register their products and businesses. As a result, five businesses and 20 products were registered successfully.
- **Improved supply chain management practices.** Harvest II partners across crop subsectors have adopted and repeatedly used a variety of improved supply chain management practices, as shown in Table I. (Only unique individuals adopting at least one new supply chain management practice are counted in the bottom row. The number of individuals is therefore less than the number of total adoptions, given that some individuals adopted more than one practice.)
 - **Cashew nut Association of Cambodia (CAC)** partnered with technology solution provider CropIn to develop a traceability system for Cambodia's cashew sector. CAC delivered training on its new digital platforms, AcreSquare and SmartFarm, to 965 cashew nut farmers. Following the training, 764 cashew nut farmers registered with the system. Five buyers signed contract agreements to buy cashew from the registered farmers, generating over \$2 million in dried cashew nut sales. In addition, Kenkoshoku partnered with CropIn to promote traceability technology for vegetables. CropIn is working to translate the platform into the Khmer language.
 - **Cambodian Agriculture Cooperative Corporation (CACC)**, in partnership with the Japanese nongovernmental organization (NGO) IVY, developed an internal control system for organic cashew traceability and organic certification. CACC also provided technical assistance to 63 cashew farmers in Preah Vihear to trace the adoption of organic farming practices.
 - **Azaylla**, a safe fruit and vegetable wholesaler and distributor, launched a new traceability and quality control system based on artificial intelligence (AI) across ten farms and five packing houses. The system provides customers with information about product origin and quality updates as products travel through the supply chain.

Table I. Improved Supply Chain Management Practices Adopted over the Life of Project, Disaggregated by Crop

Improved Practice	Vegetable	Mango	Longan	Cashew	Total
Adoption of improved post-harvest handling practices	65	62	-	-	127
Creation of, or improvements to, value addition	217	-	-	965	1,182
Adherence to recognized production and food safety standards	38	608	219	999	1,864
Formal or informal contract farming agreements	189	132	-	140	461
Number of unique individuals repeatedly using at least one improved practice	509	802	219	2,104	3,634
Number of individuals participating in Harvest II over the life of project					9,464

¹ Misota and Confirel received ISO 22000, Misota and CSL received HACCP, Veha received GMP certifications.

Percent of Harvest II project-assisted buyers and suppliers who repeatedly applied at least one improved supply chain management practice	38%
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KIA 1.3 FINANCIAL OPPORTUNITIES INCREASED

- Assisted project partners to access financing.** Through Harvest II's grants and assistance with access to finance, we partnered with a dozen financial institutions including AMK, ABA Bank, Hatha Bank, and other MFIs to qualify and disburse combined loans of \$3,171,821 to 27 buyers, ACs, and producers as shown in Table 2. Additionally, through Harvest II facilitation, we helped 421 borrowers (especially wholesalers and collectors) obtain combined cash advances and input credits of \$703,873 to increase their working capital and cover production costs. Harvest II also disbursed grants of \$3,321,127 to 55 private sector firms (a few firms received two grants). This resulted in \$7,196,821 of financing accessed by 503 processors, collectors, ACs, and producers over the life of the project.
- Assisted market actors to access supply chain financing.** Through Harvest II's grant, AMK developed a supply chain financing (SCF) model to meet the short-term financing needs of horticulture MSMEs and disbursed a total of \$1,957,522 in supply chain financing to eight market system actors, helping them increase their working capital and expand their market reach. Harvest II also helped companies obtain \$282,501 in traditional loans, resulting in \$2,240,023 of financing disbursed by AMK to 11 borrowers as shown in Table 2.

Table 2. Life-of-Project Financing Accessed by Harvest II MSMEs through Financial Institutions

Financial Institution	Private Companies (Exporter/Processors)		Buyers (Wholesalers / Retailers / Collectors)		ACs/Associations		Producers		Agro-input companies		Total	
	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Total	Value
AMK MFI	1	40,000	4	611,500	-	-	1	60,000	5	1,528,523	11	2,240,023
SME Bank	1	300,000	1	150,000	-	-	-	-	-	-	2	450,000
Advanced Bank of Cambodia (ABA)	-	-	1	160,000	-	-	-	-	-	-	1	160,000
Amret MFI	-	-	1	16,000	3	76,000	1	10,000	-	-	5	102,000
Hattha Kaksekor	-	-	1	80,000	-	-	-	-	-	-	1	80,000
Chamroeun MFI	-	-	-	-	2	70,000	-	-	-	-	2	70,000
Sathapana Bank	-	-	-	-	-	-	1	25,000	-	-	1	25,000
Cambodian Post Bank	-	-	-	-	-	-	1	20,000	-	-	1	20,000
Idemitsu Saison MFI	-	-	1	12,000	-	-	-	-	-	-	1	12,000
Prasac MFI	-	-	1	11,048	-	-	-	-	-	-	1	11,048
LOLC	-	-	-	-	-	-	1	1,750	-	-	1	1,750
Total	2	340,000	10	1,040,548	5	146,000	5	116,750	5	1,528,523	27	3,171,821



2. SUB-PURPOSE 2: IMPROVED MARKET LINKAGES

Harvest II fostered relationships between buyers, producers, financial institutions, input supply companies, and retailers. It offered incentives for increased investment and farmer engagement, which enabled firms to expand products and services. It also connected companies with potential partners such as processors, exporters, and local and international distributors. The project focused on encouraging innovative collaboration that captured new development and growth opportunities.

KIA 2.1 LINKAGES BETWEEN VALUE CHAIN ACTORS CREATED

- Strengthened commercial partnerships.** Harvest II developed and strengthened commercial partnerships between 59 buyers and 1,641 producers across four subsectors, helping them develop and sign action plans mapping out how they would work together. In addition, Harvest II connected buyers and producers with other market actors such as input firms and other service providers. The partnerships resulted in \$50,197,423 of incremental farm-level sales and \$74,834,003 in firm-level sales over the project's five-year period, as shown in Table 3 below.

Table 3. Life-of-Project Incremental Sales at Farm Gate, Disaggregated by Crop

Crop Type	Buyers	Suppliers	LOP Incremental Sales at Farm Gate (USD)	LOP Sales at Firm Level (USD)
Vegetables ²	19	455	\$9,752,387	\$13,028,552
Mango	7	143	\$5,398,648	\$14,054,944
Longan	10	118	\$8,032,934	\$15,852,605
Cashew	19	855	\$20,520,718	\$22,416,353
Other (peppercorn, turmeric, orange, banana, other fruits)	4	70	\$6,492,736	\$9,481,549
Total	59	1,641	\$50,197,423	\$74,834,003

² Vegetables include chili, cabbage, eggplant, long bean, wax gourd, cucumber, and other mixed vegetables. Vegetable sales amounted to 35 percent of target.

- **Facilitated the adoption of formal business agreements through contract farming and purchase agreements.**

Contract farming

- **CACC** signed contract farming agreements with nine organic cashew ACs in Preah Vihear and a sales agreement with Nutland BV company in the Netherlands to supply more than eight tons of organic kernels.
- **Tasey AC** signed contract farming with six ACs and purchase agreements with Aliments, Snadai Me market, and Green Baitong Samlot AC.
- **Aliments** signed contract farming with 25 of the 50 farmers who received participatory guarantee system (PGS) training. In addition, Aliments added five retail franchises, thus expanding their market presence.
- **SHE Agrocarn** signed contract farming with 35 vegetable, mango, and cashew farmers and signed business partnerships with SKOPA, Ponlei Thamacheat, RingaCam, Kirirom Food, and many more.
- **Chey Sambo Cashew Nut Processing Handicraft (CSC)** established contract farming with seven cashew producers to ensure the quantity and quality specifications of its cashew supply.

Purchase agreements

- **Handcrafted Cashew Nut Stung Treng (HCST)** signed purchase agreements with 10 domestic buyers and contract farming with 57 cashew producers. In addition, HCST signed memoranda of understanding (MoUs) with five international buyers from Portugal, South Korea, Turkey, Singapore, and the United States.
- **Ample Agro Product** signed purchase agreements with seven ACs that are together comprised of 59 cashew producers. The firm also signed sales agreements with four international buyers in France, Hong Kong, the U.S., and Canada to export cashew kernel, Kampot pepper, dehydrated mango, and pineapple.
- **Kamya AgriTrade** signed a purchase agreement with an AC leader representing 12 ACs producing organic cashew in Preah Vihear province. A list of 12 ACs and quantities to be purchased were included in the purchase agreement.
- **Navita** signed purchase agreements with two longan collectors and business partnerships with Aliments, Snadai Me, KCCV, Jet-Food, and AgroNature.

KIA 2.2 MARKET INCENTIVES FOR PRIVATE-SECTOR ENGAGEMENT AND INVESTMENT DEVELOPED

- Over its five-year period, Harvest II's 81 private-sector partners invested a combined total of \$27,961,555 (Table 4). This includes new investments of more than \$2 million to expand processing lines primarily for cashew, longan, and mango. It also includes a total of \$1.9 million invested by 12 agribusinesses to expand their cleaning and packing facilities. With this capital expansion, the agribusinesses will be able to increase profits and sales by supplying high-quality and in-demand products to retailers including supermarkets in Phnom Penh and Siem Reap.
- Harvest II recognized the importance of farmers' adoption of climate-smart agricultural practices. In response, the project grants to market actors that established more than 263 greenhouses and net houses, most of which were equipped with irrigation systems. These grantees completed new investments totaling \$414,087 to increase vegetable yields for year-round production and meet the market's demands.
- Harvest II worked with financial institutions and buyers to provide \$6.3 million in cash advances and input credit to producers to help them expand their production.

Table 4. Life-of-Project Investment by Province and Crop

Province	Vegetables	Mango	Longan	Cashew	Other	Cross-Cutting	Life-of-Project Investment
Pursat	\$172,392	-	-	\$106,166	331,784	-	\$610,342
Battambang	\$2,342,848	\$3,987,714	\$5,767,621	\$289,819	471,827	-	\$12,859,830
Siem Reap	\$993,773	\$139,721	-	\$936,874	20,375	-	\$2,090,743
Kampong Thom	\$123,242	-	-	\$4,021,745	-	-	\$4,144,987
Phnom Penh	\$1,750,422	\$28,599	\$26,216	-	268,708	\$45,710	\$2,119,655
Kampong Speu	-	\$4,099,458	-	-	-	-	\$4,099,458
Mondul Kiri	\$26,748	-	-	-	-	-	\$26,748
Preah Vihear	-	-	-	\$1,953,965	-	-	\$1,953,965
Stung Treng	-	-	-	\$30,492	-	-	\$30,492
Banteay Meanchey	-	-	\$25,336	-	-	-	\$25,336
Total	\$5,409,425	\$8,255,492	\$5,819,173	\$7,339,061	1,092,694	\$45,710	\$27,961,555

- **Accelerated new private-sector investment.**

- **CSC** invested \$280,000 in a new factory and an additional \$300,000 for new machinery and equipment. This new facility created 35 full-time jobs and has the capacity to produce 15 tons of cashews per month. Over two years, CSC exported 60 tons of cashew nuts to Japan through Top Planning Japan (TPJ).
- **HCST** invested \$130,000 in a new factory and an additional \$85,000 in new machinery and equipment. This investment has helped HCST to sell cashew nuts to buyers in the U.S and other international markets.
- **Ample Agro Product** invested \$180,000 in building renovation and purchasing machinery and equipment for cashew processing.
- **Twin AgriTech** invested \$100,000 in machinery and equipment to scale up its production of compost and vermicomposting fertilizer from vegetable waste.
- **Yamato Green** invested \$110,000 in establishing 11 greenhouses and created eight new jobs for youth in Battambang and Mondul Kiri provinces. Yamato Green also launched a store called “the Fresh Shop” that sells fruits and vegetables from its greenhouses.
- **Ponlei Thamacheat** invested \$20,000 in processing equipment to develop new products.
- **AgriOn** invested \$221,469 in establishing its logistics and cold-storage equipment to ensure compliance with food safety standards.
- **Richfarm** invested \$340,805 in developing a mango demonstration farm to showcase sustainable practices to produce safe, higher-yielding mangos.

- **Increased logistics investment opportunities.**

- Harvest II conducted a study on logistics challenges in the horticulture sector and collaborated with the Cambodia Logistics Association (CLA) to host an online workshop highlighting logistics challenges, solutions, and investment opportunities.
- Following the workshop, Harvest II awarded a grant to Puzzle Solution, a third-party logistics provider, to help small exporters gain access to potential markets. Puzzle Solution helped eight companies send samples to the U.S. and the Middle East (Ringacam Enterprise, Kamy AgriTrade, Kirirom Food Production, Misota, Ample Agro Product, Confirel, Kokopon, and SHE Agrocac). Puzzle Solution also provided logistics services to Misota, SHE Agrocac, KFP, and Top Planning Japan (a CSC partner) to successfully export products to Japan.

- Harvest II organized training on international trade logistics, increasing the 25 participants' understanding of the export market. Following the training, Harvest II connected Generation One, a trading company, with six processors (CSL Enterprise, New Idea Enterprise, KCCV Plantation, Navita, Veba Juice, Leang Leng Enterprise) to discuss export opportunities. Generation One sent the processors' product samples to Australia, England, Indonesia, and France. With Harvest II grant funding, Generation One also helped five processors (Green Farmers Siem Reap Association, SKOPA, Misota, KCCV, and Veba Juice) promote their products at Karot supermarket.
- **Increased jobs resulting from new investments**
 - Harvest II support increasing firms' sales and catalyzing new private sector investment led to the creation of the equivalent of 871 full-time jobs at 59 firms. In addition, 1,642 jobs were created at the producer level. These buyer and supplier relationships resulted in 2,513 jobs created at firms and farms for the life of project as shown in Table 5.

Table 5. Full-Time Equivalent (FTE) Jobs Created

Crops	# of Suppliers	# of Jobs Created at Farms	# of Buyers	# of Jobs Created at Firms	Total Jobs Created at Farms and Firms
Vegetables	455	728	19	219	947
Mango	143	129	7	182	311
Longan	118	177	10	209	386
Cashew	855	599	19	200	799
Other crops	70	9	4	61	70
Total	1,641	1,642	59	871	2,513

Note: Other crops consist of peppercorn, turmeric, orange, banana, and other fruits.

KIA 2.3 MARKET CHAIN COORDINATION IMPROVED

- **Increased opportunities in high-value markets.**
 - Harvest II introduced Misota to several partners to help the company promote Cambodian value-added products and expand its markets. Misota has successfully entered modern retail outlets Makro, Chip Mong, and Lucky and has partnered with vegetable distributor Azaylla. Misota also signed a formal contract with e-commerce app PIIK MALL, and its products are now available on this platform.
 - Harvest II collaborated with the MoC and Makro supermarket to host a one-week trade fair at Makro. Harvest II connected eight processors (Navita, Veba, KCCV, CSL, SHE Agrocarn, Misota, Ponlei Thomacheat, and Green Farmer AC) to display their products at Makro. Following the trade fair, Harvest II facilitated discussions between the eight companies and Makro about long-term business partnerships.
- **Promoted the adoption of a product and market diversification strategy.**
 - **SHE Agrocarn** signed an agreement to be Navita's local distributor, supplying to 20 local markets—Navita's products are now available at premium supermarkets such as Bayon, Chip Mong, and Khmer Organic. SHE Agrocarn also connected Navita with international buyers: a Thai buyer purchased ten tons of longan in syrup, and a Japanese trade and services firm placed an order of organic pepper pickle. In addition, SHE Agrocarn helped Ringacarn sell to market partners and helped Ponlei Thomacheat, Green Farmers, SKOPA, New Idea, Tasey AC, Aliments, Rich Farm, and Kirirom Food with product design, branding, and packaging—SHE Agrocarn will connect these products to its market networks when the products are ready.

- Harvest II provided continuous support to 19 participants from eight processing firms on longan and other fruit processing. Several processors have developed new products after the trainings, demonstrations, and follow-up coaching: Navita and Veba created new products such as longan in syrup, dried fruits (longan, mango, pineapple, and dragon fruit), and fruit juice (mango, longan). Horyma tested a new mango juice product. Phorseen and YBT developed dried longan. Thubo developed ginger and turmeric powder. SKOPA developed black and red pepper pickle.
- During the COVID-19 pandemic, Harvest II partners adopted digital solutions by using online platforms to deliver training, connect with customers, and expand their markets. Many Harvest II partners—including AgriOn, Natural Agriculture Village (NAV), Aliments, and Snadai Me—used their social media pages for product promotion. They also connected with online delivery services such as Nham24, Food Panda, and WowNow to deliver products to end consumers. Recognizing the importance of diversifying markets during the pandemic, Navita, Ponlei Thamacheat, Snadai Me, CSL Enterprise, and New Idea Enterprise registered as suppliers on the online app [Khmun e-shop](#).
- **Expanded potential export market linkages.**
 - Harvest II market linkages partner 20/20 Development Company (20/20DC) organized 12 virtual introductory meetings between five Cambodian companies (Misota, Confirel, Kamya AgriTrade, Kirirom Food Production, and Ample Agro Product) and six U.S. buyers to explore trade and export opportunities. The Cambodian companies are currently negotiating with³ five interested buyers to export of to the U.S. market. These products include palm sugar and processed cashew, pepper, moringa, and other dried fruits including Pursat orange, mango, papaya, banana, and pineapple.
 - With Harvest II grant support, the Cambodia Pepper and Spices Federation (CPSF) launched an export mission to the Middle East and North Africa (MENA), aiming to assist 25 Cambodian companies in establishing exports to the region. CPSF conducted a training on export action plan development for the 25 Cambodian agribusinesses to develop their export action plans. CPSF organized an online exposition for the Dubai market and connected the 25 Cambodian agribusinesses with 19 buyers in Dubai to explore export market opportunities. As a result of CPSF’s activities, four companies (Kenko Shoku, Ample Agro, Kokopon, and Ringacam) have sent product samples to international buyers through Puzzle Solution. (Puzzle Solution signed an MoU with CPSF to facilitate export logistics for Cambodian pepper and spices products.)

³ The five buyers are Ken Blanchette Food Consulting, Angkor Foods, Woodland Foods, Lluvia Sugar International, and Hanson Faso.



3. SUB-PURPOSE 3: IMPROVED GOVERNANCE AND ENABLING ENVIRONMENT

Harvest II engaged government entities, the private sector, and civil society organizations to foster a policy and regulatory environment in which private-sector concerns are taken into consideration and stakeholders work together to address constraints and promote sustainable growth in the horticulture sector. Over the past five years, Harvest II collaborated with various ministries, departments, and working groups to support the development of policies, action plans, and laws. In so doing, the project provided targeted governance and enabling environment support to DAI, GDA/MAFF, and the MoC.

KIA 3.1 HORTICULTURE SECTOR ADVOCACY AND COORDINATION PLATFORMS STRENGTHENED

- **Strengthened the fruit and vegetable subsector.** Harvest II worked with Cashew Core Team and various key stakeholders to support the cashew subsector development. As a result, the team formulated cashew policy and initiated Cambodian Cashew Federation. The Federation will mobilize all resources to improve cashew production of high-quality nuts and strengthen the cashew supply chain to make it more competitive.

KIA 3.2 ROYAL GOVERNMENT OF CAMBODIA'S CAPACITY TO ADDRESS HORTICULTURE CONSTRAINTS IMPROVED

- **Collaborated with MAFF to develop priority policies to address horticulture constraints.** Harvest II supported several government stakeholders to develop policies and related resources.
 - Worked with DPS to draft the Roles of Private Sector in Crops and Livestock section of the Agricultural Sector Master Plan 2020 –2030 (policy #1). This plan includes policy measures to promote private-sector investment and trade for the agriculture sector. It also reviews the role of agriculture in Cambodia's future economic development, identifying challenges and opportunities for agricultural trade and investment.
 - Worked with DAI to draft five cross-cutting policies: *Prakas* on Dispute Resolution Procedure (policy #5), Contract Farming Law (policy #4), Contract Farming Policy (policy #6), Law on Quality and Safety of Agricultural Products (policy #7), and Guideline for

Investment in Agro-Processing (policy #17). These policies work across the agriculture sector to protect farmers, promote trust among actors in agricultural value chains, standardize agricultural products, and attract and incentivize investment in the agriculture sector.

- Worked with GDA to develop four strategic plans for export enhancement corresponding to the Crop Master Plan 2030: National Horticulture Policy (policy #3); Longan, Mango, Pepper, Durian, Yellow Banana, and Avocado Value Chain Strategic Plan for Export Enhancement (policies #10-15); Plant Protection and Quarantine Strategic Development Plan 2022–2027 (policy #9); and *Prakas* on Seed Movement Management (policy #16). The National Horticulture Policy and Strategic Plan for Export Enhancements aim to modernize, standardize, and commercialize the horticulture sector and its commodities to meet domestic demand and take advantages of international market opportunities. The Strategic Development Plan and *Prakas* are cross-cutting mechanisms to protect Cambodia’s strategic interests and strengthen internal pest management systems to improve domestic production, improve national food security and exports, and control the movement of seeds inside the country.
- ***Collaborated with MoC to develop policy priorities to address horticulture constraints.*** Harvest II worked with MoC to develop:
 - “Chapter 8: Agribusiness Value Chain for Export Enhancement of Cambodia Trade Integration Strategy” (policy #2) examined four selected agricultural sectors: cassava, (milled) rice, rubber, and fruits and vegetables. The chapter focuses on the promotion of Cambodia’s agro-processing industry through integration into regional and global production chains, as well as on value addition and export diversification.
 - The Cambodia Cashew Policy (policy #8) will make Cambodian cashew more competitive by improving its production of high-quality cashew nuts where there is an opportunity to commercialize, diversify, and integrate into international markets.

KIA 3.3 PUBLIC-PRIVATE DIALOGUE ENCOURAGED

- ***Facilitated public-private dialogue.*** Harvest II organized four sub-national public-private dialogues in its Zol and a national dialogue in Phnom Penh. These brought together public- and private-sector partners to discuss challenges and solutions. Harvest II leveraged the dialogues to build a robust network within agriculture sector and strengthen the enabling environment.



Harvest II helped increase the visibility of partners and their products domestically and internationally. Here, Secretary of State of MAFF H.E. Hean Vanhan and USAID Mission Director Nancy J. Eslick visit a display of Harvest II partners' products during the project's close-out ceremony.

4. COLLABORATION EFFORTS

WITH GOVERNMENT

- Harvest II worked with GDA and the Provincial Department of Agriculture, Forestry and Fisheries (PDAFF) to deliver CamGAP training to 842 mango, longan, and turmeric producers in Battambang and a few other provinces through Harvest II grants to CACA, Angkor Green Investment and Development (AGID), Seasonfresh, and Ringacam. These grantees helped farmers improve quality and productivity of mango, longan, and turmeric through CamGAP training and technical assistance. Resulting from the collaboration with GDA and PDAFF, these grantees helped 797 producers apply for CamGAP certifications; of these, 46 received certificates.
- Harvest II worked with PDAFF, the GDA, and Tasey AC to organize a formal ceremony to commemorate Cooperative Union Creation Day, when 11 horticulture ACs formally agreed to form a union to better represent members, negotiate, and serve as a liaison between producers, buyers, and other market actors.
- Harvest II encouraged our project partners to exhibit and sell their products through a weekly farmers' market organized by the Accelerating Inclusive Markets for Smallholders (AIMS) project, to promote safe and local products including vegetables, fruit, and livestock in Battambang and Siem Reap provinces. Private-sector exhibitors—including ACs, farmers, vegetable suppliers, and fruit processors including Laey Baitong, Tasey AC, Misota, and In Laihourt, sold their products and increased sales.

WITH OTHER PROJECTS

- Over the last five years, Harvest II worked with multiple projects to pursue common goals related to strengthening Cambodia's horticulture sector. The project worked with Cambodia Horticulture Advancing Income and Nutrition (CHAIN) on policy creation; with HEKs, IVY, and CAC on cashew programs; and with Khmer Enterprise on exports. Harvest II and CHAIN

hosted eight inclusive public-private dialogues (PPD) at the provincial level to enhance government awareness of and responsiveness to private sector concerns. Building on the findings and results from the provincial-level dialogues, Harvest II and CHAIN jointly organized a National Public-Private Dialogue on the Horticulture and Cashew Subsector in Phnom Penh.

- Harvest II collaborated with the HEKS project to launch an export competitiveness program for local cashew processors, facilitated by Mr. Jim Fitzpatrick, an international cashew expert. The program selected eight local coaches to provide capacity-building support to 19 processors and help them develop export plans. Three of the cashew processors (Kamya, HCST, and Ample Agro Product) developed export plans and connect with various international buyers in Singapore, South Korea, the U.S., and the European Union.
- Harvest II collaborated with Khmer Enterprise to conduct an export marketing training program, providing 100 Cambodian SMEs with practical tools to promote their products in international markets. The training was facilitated by the Asia Society for Social Improvement and Sustainable Transformation (ASSIST), which also selected 20 SMEs to receive mentoring sessions on how to establish connections and deal with buyers in South Korea. After the training, Khmer Enterprise established its own Export Market Development Grant program to support agricultural SMEs' export promotion activities.
- Harvest II collaborated with the CAC to organize the webinar "Cambodia and the World Cashew Market," moderated by cashew expert Jim Fitzpatrick. With 45 participants in attendance, the webinar raised awareness among Cambodian cashew processors about the growing global demand for Cambodian cashew.
- Harvest II collaborated with the IVY and HEKS projects—as well as government officials from the PDAFF and PDOC in Siem Reap and Kampong Thom—to organize an exposure visit for cashew actors to learn about harvesting, post-harvest handling, and supply chain management. Participants learned new practices and established relationships with other value chain actors.
- Harvest II worked with the National Cooperative Business Association CLUSA International (NCBA CLUSA) to recruit a volunteer who worked with a Harvest II agronomist to revise the Pesticide Evaluation Report and Safe Use Action Plan (PERSUAP), conduct a virtual training-of-trainers on integrated pest management for cashew producers, and provide a refresher training on PERSUAP to 20 input suppliers.



Harvest II provided grants to several women-led enterprises like CSC, enabling them to create more jobs for other women. 29 percent of grants went to women- or youth-led groups.

5. GRANTS AND CROSS-CUTTING INITIATIVES

This section describes how grants and cross-cutting initiatives were addressed during the project.

GRANTS MANAGEMENT

Harvest II used grants to mobilize investment, support improved practices and new approaches, and catalyze change in the market system

Expenditure of grant funds

Harvest II's original grant fund was \$2 million. With additional COVID-19 Response funds, this increased to \$3.8 million in August 2020. During the life of the project, Harvest II awarded 63 grants to 55 unique entities, 17 of which were led by women or youth. All grants were milestone based: funds were not paid unless grantees achieved the milestones detailed in their grant agreements. Some grantees did not complete all milestones or meet 100 percent of targets, which is not uncommon in a performance-based program working in a dynamic market environment, especially with entrepreneurs who are in many cases learning by doing. Thus, the potential value of awarded grants (\$4,519,682) was 36 percent greater than the amount disbursed. By the time grantees completed their work, payments to grantees amounted to \$3,321,127, as detailed in Table 6, which also shows spending breakdown by the main grant programs.

Table 6. Harvest II Life-of-Project Grant Spending

Program	Number of Grants	Disbursed Amount
Climate Change Training	2	\$171,395
Horticultural Solutions	34	\$1,972,581
Investment Accelerator	13	\$504,540
Testing Vegetable Innovations	1	\$24,140
Logistics and Export Facilitation	13	\$648,471
Total	63	\$3,321,127

Grantee contributions to achievement of project objectives

Harvest II grantees were responsible for a diverse set of achievements. Many of these—such as sales, investment, and job creation—are captured by the project’s main performance indicators. Specific accomplishments of each of the 63 grants are detailed in Annex D2. Of particular note, grants led to:

- **Strengthening of women- and youth-led businesses.** Of the 55 entities that received Harvest II grants, 17 (31 percent) were led by women or youth. In several cases, Harvest II grants played a crucial role, not only in companies’ expansion, but also in their ability to stay in business during the COVID-19 pandemic. Grants were used to create new processing lines, develop new products, and improve quality standards. Combined, the 17 companies helped create 583 jobs, made new investments of \$7 million, and generated \$13 million in new sales.
- **Expansion of nethouse technology and other climate-smart agriculture.** Nethouse-based agriculture is an important tool to support year-round production, yet it requires new skills and equipment, as well as more working capital. Eight grants contributed to the expansion of this technology in some way. For example, Tasey AC helped 29 farmers establish 60 nethouses in Battambang; Chamkar Kampong Lapov established 55 nethouses in Battambang; and Laey Baitong, Aliments, and AgriOn established their own nethouses and greenhouses to grow vegetables in Battambang and Kampot, respectively. Additionally, Yamato Green installed three greenhouses in Battambang and 15 greenhouses in Mondul Kiri province. Other grants supported other climate-smart technologies, such as the production of compost or biochar, establishment of smart irrigation for mango production, and purchase of new bio-digester machinery to process vermicomposting, which cultivates earthworms to convert organic waste into fertilizer.
- **Dissemination of digital technologies.** CropIn and the CAC established a digital traceability system that helped them capture \$2 million in sales, mostly in exports. CropIn established a digital sourcing system for farmers, which includes a quality assurance system based on artificial intelligence. And finally, fintech company Banhji introduced their accounting system to 73 ACs and 13 SMEs.
- **Registration of new products.** Grantees registered 140 new products with the Institute of Standards of Cambodia under the Ministry of Industry, Science, Technology, and Innovation. Several grantees—Misota, Kirirom, Confirel, and Handcrafted Cashew Nuts Stung Treng—obtained ISO and/or HACCP certification through accredited bodies from other countries like Thailand, the U.K., and Singapore. A list of these products can be found in Table 8 on the next page.

GENDER & YOUTH

Encouraging women-owned or women-led agribusinesses to apply for Harvest II grants was a challenge because women entrepreneurs tended to present their current business situations modestly and underemphasize the potential of what they might achieve in the future, which hindered their grant proposals. Recognizing this pattern, Harvest II formed a dedicated team to share information about the grant programs and encourage women to apply. A few women entrepreneurs who were awarded Harvest II grants in Year 2 began to encourage other women in their networks to apply for Harvest II grants.

To engage youth, Harvest II worked with the Young Entrepreneurs Association of Cambodia in Battambang to collect a list of potential prospects and had multiple discussions the areas of support to those youth-led enterprises. Resulting from the collaboration, we qualified two companies operating business in fruits and vegetables.

Table 7 summarizes the ways women and youth benefitted from Harvest II support.

Table 7. Women and Youth Benefitting from Harvest II Support

MSME	Type of MSME	Area of support	Total	# of Women	# of Men	% Women	# of Youth	# of Non-Youth	% Youth
Misota	Grantee	Job creation	50	31	19	62%	30	20	60%
In Laihourt	Grantee	Job creation	45	34	11	76%	16	29	36%
Azaylla	Grantee	Job creation	7	3	4	43%	4	3	57%
TwinAgri	Grantee	Job creation	5	2	3	40%	3	2	60%
Navita	Grantee	Job creation	5	4	1	80%	4	1	80%
Agribuddy	Grantee	Job creation	12	7	5	58%	6	6	50%
AgriOn	Grantee	Job creation	23	8	15	35%	8	15	35%
Banhji	Grantee	Job creation	10	6	4	60%	8	2	80%
Hung Hiep	Grantee	Job creation	3	1	2	33%	1	2	33%
Leang Leng	Grantee	Job creation	10	3	7	30%	7	3	70%
Confirel	Grantee	Job creation	16	11	5	69%	5	11	31%
Snadai Me	CP buyer	Job creation	5	4	1	80%	5	0	100%
Green Farmers Siem Reap Association	CP buyer	Job creation	34	31	3	91%	8	26	24%
Grantees	Mixed	Grant support	55	15	40	27%	2	53	4%
MSMEs	Mixed	Access to financing	7	3	4	43%	2	5	29%
Producers	Producers	Access to financing	16	4	12	25%	1	15	6%
Total			303	167	136	55%	110	193	36%

Table 8. New Products Developed with Support from Harvest II Grants

Grantee	Number of Products	Products	Domestic Market	International Market
AgriOn	1	Safe Produce	☑	-
Aliments	7	Fruit Juices	☑	-
		Safe Produce	☑	-
Azaylla	4	Fruit Juices	☑	-
		Honey/Jams/Syrups/Powders	☑	-
		Nuts	☑	-
		Safe Produce	☑	-
Confirel	46	Beverage Products	☑	☑
		Chips & Candies	☑	☑
		Honey/Jams/Syrups/Powders	☑	☑
		Nuts	☑	☑
		Sauces/Spreads/Jams/Vinegar	☑	☑
		Spices/Salt/Sugar/Herbs	☑	☑
		Various	☑	☑
CSL Enterprise	14	Beans and Flour	☑	-
		Chips & Candies	☑	-
		Dried Fruit	☑	-
		Nuts	☑	-
		Spices/ Salt/ Sugar/ Herbs	☑	-
Kirirom Food Production	10	Dried Fruit	☑	☑
		Safe Produce	☑	☑
Laey Baitong	1	Safe Produce	☑	-
Leang Leng	6	Sauces/Spreads/Jams/Vinegar	☑	☑
Misota	12	Dried Fruit	☑	☑
		Fruit Juices	☑	-
		Honey/Jams/Syrups/Powders	☑	-
		Nuts	☑	☑
Natural Agricultural Village	9	Cereals, Nuts	☑	☑
		Honey/Jams/Syrups/Powders	☑	-
		Spices/ Salt/ Sugar/ Herbs	☑	-
		Safe Fruits & Vegetables	☑	-
Navita Healthy Food & Beverages	4	Dried Fruit	☑	☑
		Honey/Jams/Syrups/Powders	☑	-
Ponlei Thamacheat	8	Bath and Beauty	☑	-
Ringacam	8	Fruit Juices	☑	☑
		Nuts	☑	-
		Spices/ Salt/ Sugar/ Herbs	☑	-
Handcrafted Cashew Nut Stung Treng	5	Nuts	☑	☑
Kamya AgriTrade	5	Honey/Jams/Syrups/Powders	☑	-
		Nuts / Cashew Milk	☑	☑
Total	140		79	77

Youth-led enterprises supported by Harvest II Grant

- Navita is a small youth-led fruit-processing company created by an enthusiastic sibling-duo based in Battambang province. The company faced challenges accessing capital, finding new markets, and improving product quality. With Harvest II's grant and technical support, Navita upgraded its warehouse facility by installing a solar drying chamber, gas heater, and other processing equipment. The company developed four new products, successfully registered all four products

for product registration certificates, and is now selling them in retail stores and supermarkets.

- Laey Baitong is led by an energetic Cambodian youth and focuses on improving safe vegetables and increasing domestic demand through social media marketing and establishing retail shops. The company began its work with Harvest II as a buyer in a commercial partnership. Harvest II helped connect this small retail shop in Battambang with reliable suppliers such as Tasey AC. Recognizing this entrepreneur's eagerness to grow their business, Harvest II provided grant and technical support to help Laey Baitong upgrade its retail shop by scaling up its post-harvest facility for cleaning, packaging, and pre-cooling storage. Additionally, Laey Baitong leveraged its Harvest II grant to help 108 farmers to improve their production techniques through training and technical assistance provided by Laey Baitong. Thanks to farmers' adoption of safe vegetable practice including PGS, Laey Baitong signed purchase agreements with 40 of them. The company also signed contract agreements with eight retail outlets to sell organic vegetables using a franchise model and successfully established four company-run outlets.

Women-led enterprises supported by Harvest II Grant

Harvest II identified several lessons learned through its collaboration women-led businesses. Table 9 on the next two pages summarizes lessons learned and key achievements from the project's work with 15 such firms.

ENVIRONMENTAL COMPLIANCE

In response to the Initial Environmental Examination (IEE), Harvest II developed an Environmental Mitigation and Monitoring Plan (EMMP) that focused on minimizing environmental impacts in three main intervention areas: pesticides, support for SMEs, and agricultural activities.

To effectively implement the EMMP, Harvest II conducted trainings and refresher trainings for staff, partners, input suppliers, and grantees. The project also used tools such as the EMMP checklist, MSME environmental screening, SUAP checklist, and environmental compliance checklist.

Harvest II developed a PERSUAP to better understand potential environmental risks—especially those caused by pesticide use in agriculture—and to define specific measures to minimize those risks. The PERSUAP received approval from USAID in December 2018 and was revised in November 2020 to update the list of available pesticides, add newer and safer pesticides, incorporate elements on biological controls, and remove newly restricted pesticides. Harvest II hired a consultant to provide several trainings on PERSUAP to hundreds of government officials, input suppliers, and Harvest II staff. After training, Harvest II staff conducted multiple follow-ups to measure if any practices were adopted by input firms.

In addition, Harvest II conducted an environmental screening review of grant applicants using the Environmental Review Form prior to submitting grant packages for USAID approval. All grantees were introduced to the EMMP and PERSUAP before implementing their grant activities to ensure that they took environmental stewardship seriously. Challenges and lesson learned related to environmental compliance during implementation are detailed in Annex B.

Table 9. Summary of Challenges, Solutions, and Accomplishments of Harvest II's Grants to Women-led Enterprises

Component and Enterprises	Number of Women-led Enterprises	Challenges	Solutions Supported by Harvest II Grant	Main Accomplishments	Impacts
Vegetables Natural Agriculture Village (NAV), Husk Ventures, Aliments	3	Lack of capital for sourcing reliable and safe vegetables. Farmers' limited understanding of production techniques for safe vegetables as well as limited availability and accessibility of quality of agro-inputs hindered expansion of organic vegetable production.	Expand safe vegetable production for consistent year-round supply. Promote biochar products to improve production in horticulture value chains.	Hundreds of farmers adopted improved production and post-harvest practices to increase yield and to improve quality of safe vegetables to supply to supermarkets and retail markets. With Harvest II grant support, these three women-led enterprises generated \$1,224,133 of sales at farm-level and \$1,245,047 of sales at firm-level. During the grant periods, over \$62,000 was injected as capital investment and 16 full-time staff members were recruited.	Increased availability of safe vegetables in modern markets in Phnom Penh, Siem Reap, and Battambang.
Mango Grove Fruit Growers, Kirirom Food Production, Seasonfresh	3	Lack of access to export markets for fresh and processed mangoes.	Improve quality and productivity of off-season mango through CamGAP training. Expand capacity for mango exports by expanding suppliers, investing in equipment, and training workers. Investments to establish a dried mango kernel processing line and cold storage facility, including mango kernel cutting machine, kernel cleaning equipment, hot air drier, chiller system, and racks.	The three mango processors and exporters invested a combined total of over \$502,000 to establish new facilities and expand processing lines. Harvest II's grant also enabled a combined total of over \$2.4 million in purchases and over \$6.1 million in sales. Additionally, these companies created 65 new jobs, and helped 461 farmers submit applications to obtain CamGAP certification.	Farmers' adoption of CamGAP, increased productivity, and improved postharvest handling have helped them meet quality requirements from these 3 companies. Improved supply chain management practices allowed Grove Fruit and Season Fresh to export fresh mangoes. Kirirom can increase exports of dried mango because of improved quality and improved waste management at the processing facility.
Longan Cambodia Agricultural	2	Challenges working with market players to provide CamGAP training and source-	Improve quality and productivity of longan through CamGAP training and technical assistance. Mitigate processor's investment risks to facilitate	Of the 297 farmers involved, 219 (74 percent) submitted CamGAP applications. CACA and KCCV	Improved longan crop productivity that contributes to subsector growth. Support for farmers to

Component and Enterprises	Number of Women-led Enterprises	Challenges	Solutions Supported by Harvest II Grant	Main Accomplishments	Impacts
Cooperative Alliance (CACA), KCCV Plantation		high-quality longan for market expansion.	the establishment of a new processing facility for dried longan.	generated a combined total of \$1,447,990 in sales, made \$1,175,829 worth of purchases from hundreds of farmers, made new investments worth \$1,175,829, and created 56 new jobs.	advance with CamGAP certification that will enable them to obtain price premiums from buyers targeting export markets with “produced in Cambodia” marketing.
Cashew Chey Sambo Cashew Nut, Handcrafted Cashew Nut Stung Treng (HCST)	2	Oversupply of cashew nuts in the local community and Cambodia broadly, but challenges expanding to new markets without greater value addition.	Leverage the women entrepreneurs’ extensive knowledge of cashew producers’ needs from their families’ generational involvement in cashew production. Support the establishment of processing facilities to address challenges and opportunities in the domestic and export cashew markets. Provide grant funding and direct technical assistance to invest in equipment for cashew peeling, shelling, grading, drying, packaging. Increase processing capacity and quality to meet standards for local and international markets.	Improved processing facilities to meet international quality standards such as Good Manufacturing Practices and Hazard Analysis Critical Control Point. New investments of more than \$264,000 combined and combined sales of over \$262,000.	More than 52 new jobs created, the majority of which were occupied by women. Sales of processed cashew nut products to existing international buyers as well as new ones (export sales are mainly to Japan, Germany, and the U.S.).
Other specialty products Ponlei Thamacheat	1	Risk of business closure due to COVID-19, which decreased market demand and sales.	Provide grant funding and technical assistance to develop a dozen value-added products based on traditional Khmer practices from crops that can be found around the house, such as plai (Zingiber Cassumunar), turmeric, fingerroot, ginger, moringa, lemongrass, and coconut.	Registration of 10 new products with the Ministry of Industry, Science, Technology, and Innovation. Completed application for product registration standard certification. More than \$20,000 invested in working capital, \$4,899 made in purchases, and more than \$19,000 in sales.	Partnership agreements signed with two business partners and other agreements signed with two suppliers. With growing business popularity, Ponlei Thamacheat has plans to expand Siem Reap to Phnom Penh.
Digital Accelerinno Tech, Kokopon,	4	Restrictions on in-person interactions due to the COVID-19 pandemic. Limited supply of reliable and high-quality products.	Leverage the growing acceptance and adoption of digital and online interactions for business transactions as an opportunity to develop more dynamic virtual communication	Training on digital literacy, branding, and marketing delivered to 170 vendors. Over \$265,000 in sales by local agro-processors and	All four companies expanded operations, supporting a combined total of 80 processors and producers to improve product quality and

Component and Enterprises	Number of Women-led Enterprises	Challenges	Solutions Supported by Harvest II Grant	Main Accomplishments	Impacts
Puzzle Solution, SHE Agrocarn			channels, grow online sales, and meet customer demand for reliable and high-quality products.	producers, export sales of \$240,000, and new investments of \$48,000.	standards to meet market requirements. As a result, 40 processors exported products to international markets.
Total	15				



Harvest II helped eight longan companies and ACs improve product quality and/or begin processing. Here, CSL processes longan. Under its grant, CSL also developed four new products.

6. LESSONS LEARNED

Harvest II demonstrates the power of private-sector partnerships formed to pursue mutually beneficial opportunities. Key lessons from the project's five-year implementation period include:

- **Buyers as an entry point in the market system.** Buyers can be a useful entry point in the market system, especially in a nascent system with weak relationships among market actors. Harvest II's initial buyer-led approach gave the project a concrete, demand-driven orientation, which was a shift from previous efforts. While the initial emphasis was on building buyer-supplier relationships, the focus eventually evolved to address constraints for the buyers themselves. This led to new commercial opportunities, such as sales of value-added products (processed, certified, etc.) and new markets. For producers, opportunities opened for those who adopted practices to produce differentiated products that provided the sales premiums and necessary incentives to invest in new production technologies, as well as to sell direct to end-markets.
- **Value of a facilitative approach.** A facilitative approach like that used on Harvest II can be useful in reminding the project team that their role is not to take responsibility for solving problems or making change happen, but to encourage and accompany others as they clarify and pursue their own goals. As facilitators, Harvest II seeded new ideas, introduced market actors to each other, helped them develop productive working relationships, and provided targeted financial support to reduce risk. It was always clear that the private sector was in the driver's seat and had the greatest stake in the outcome.
- **Market systems thinking.** Market systems thinking encourages a project and its partners to situate themselves in a broader context. It helps actors be more alert to changing conditions in the market, system-level capacity gaps and constraints, business opportunities that emerge from addressing these gaps, the benefits of new technologies and business models, and how collaboration can create benefits for many.

Given these demand-driven, facilitative, and systems-oriented approaches, the improved practices and business models undertaken during Harvest II are likely to be sustainable if the private sector continues to have the leeway to respond to market conditions and if the business enabling environment remains favorable.



Export markets offer increasing opportunities for Cambodians in the horticulture sector. Here, workers at Richfarm's mango farm are on the way to pick Keo Romeat mango for export.

7. SIGNIFICANCE OF HARVEST II INTERVENTIONS AND RECOMMENDATIONS FOR THE FUTURE

When Harvest II was launched in 2017, smallholder producers, buyers, and other market actors were uncertain about opportunities for growth and expanded sales in the horticulture sector. Limited contact between producers and buyers hindered collaboration to meet market demand and impeded communication with other market actors to access needed services. Government- and donor-funded efforts to build production capacity had begun to yield results, yet many smallholder producers struggled to access stable and sustainable markets for their products. Five years later, a more concerted and focused effort is taking shape.

REFLECTIONS ON THE PROJECT'S SIGNIFICANCE

A growing number of horticulture buyers and suppliers are engaged in mutually beneficial business partnerships, supporting one another to grow their businesses together. Buyers **invest in their supply networks**, providing trainings, technical and financial assistance, and a more secure market to their suppliers. Producers, meanwhile, work with their buyers to improve production outcomes and meet buyers' needs.

Greater coordination and collaboration between buyers and suppliers have brought improvements in product quality, operational efficiency, and business viability. Both buyers and suppliers partner with providers of supporting products and services to **develop and expand support mechanisms** uniquely tailored to the horticulture sector.

Processors have invested in factories and machinery to develop **differentiated and value-added products**, bringing jobs to the Cambodian economy. In their efforts to secure a dependable supply of raw product for processing operations, processors provide their suppliers with a stable market and needed support.

At the same time, other firms have successfully established **enhanced value chains**, sourcing premium product from a trusted network of suppliers. Buyers have developed programs to train suppliers on specialized production techniques and support certification in a wide range of standards and quality assurance systems.

As firms have invested in strengthening their supply chains to produce differentiated, value-added products and build enhanced value chains, they have found success in **new and high-value markets**. Harvest II partners supply modern retail outlets with high-quality fruits, vegetables, and processed products that adhere to strict quality assurance standards. Processors and exporters have signed purchase agreements with international buyers, leveraging the strength of their supply chains to process and export products of dependably high quality.

As the project neared its close, Harvest II conducted nine in-depth stakeholder interviews to capture our key partners' perspectives on their experience. They echo these themes. As they and many other Harvest II partners look to the future, they speak of building on the foundations of their successes over the past five years. Partners seek to **diversify their markets** by further expanding into additional market segments, both domestically and abroad. They see potential in the **expansion of domestic processing activities**, bringing further value addition to Cambodian value chains. The continued **sophistication and maturation of support services and functions** is viewed as a priority focus area that will enable continued sector growth and development.

Harvest II has engaged with the full spectrum of horticulture sector actors at each step in the supply chain. The project's adaptive market system approach has ensured that support to individual market actors has brought benefit to other market players, ultimately contributing to broader, more systemic advancements in the horticulture sector.

CLOSE-OUT CEREMONY

The project's significance was also highlighted at a close-out ceremony on May 10, 2022, where about 150 people gathered to celebrate Harvest II's five years of achievements. In his opening remarks, H.E. Hean Vanhan, Secretary of State from MAFF, said the project successfully provided inclusive economic opportunities for buyers, producers, and other market actors, and urged further increases in productivity to better enable farmers to compete with international suppliers. He added, "The results of the Harvest II project are in line with the Agricultural Sector Development Strategic Plan 2019–2023 and the Master Plan for Crop Production in Cambodia to 2030." Mission Director Nancy J. Eslick expressed pride in Harvest II's progress and said that continued innovation was essential.

Many project partners displayed their products and offered samples to attendees. Eleven private-sector firms provided testimonials about their challenges and aspirations before working with Harvest II, and how Harvest II supported them in growing their businesses and achieving their goals. Through Harvest II grants, many new opportunities arose as they were able to:

- Improve product quality and post-harvest handling,
- Obtain access to finance,
- Develop new traceability systems,
- Develop new products,
- Apply food safety standards and obtain certification, and
- Expand sales in local and international markets.

RECOMMENDATIONS

As noted in this report, participants in the market system developed significantly improved coordination mechanisms and information flows around shared commercial objectives. This strengthened and more collaborative value chain structure allowed participants to become more competitive in the market.

However, the supply chain is only as strong as its weakest link, and there are numerous "holes" gradually becoming visible as suppliers and processors have grown their capacity in the last few years.

Sustaining the current pace of development will require a greater emphasis on improving the performance of **critical services** along the value chain. Examples of key services include:

- Seed development and seedling distribution
- Laboratory services for testing and issuing certificates necessary for export
- Extension services from private-sector partners, such as buyers and input providers
- Improved transportation, warehousing, and logistics, especially for fresh products
- Capacity to aggregate and pre-process harvests from multiple farming communities
- Packaging services for retail distribution, as well as for export

Jumpstarting the development of these areas in horticulture value chains will need increased focus on two foundational elements.

- **Workforce development.** Engage existing private companies as well as educational and technical institutes to develop a cadre of skilled agribusiness service technicians. For example, a workforce development program that supports the need for specific services that have a market need could include the use and maintenance of a mobile packing facility, agro-mechanization technologies, solar irrigation, private label processing, organic waste disposal, etc.
- **Project financing.** Engage commercial financial partners to support services with a proven business case from qualified applicants, such as offering working capital to ACs to support aggregation and off-season resale of products, nethouses for suppliers who hold off-take guarantees, and export financing for processors who have received purchase orders. Deploy the U.S. International Development Finance Cooperation (DFC) facility, where feasible, to buy down risk and support the development or deployment of other financial instruments such as factoring solutions.

Value chain services are likely to play an increasingly key role in the short to medium term as Cambodia responds to macroeconomic shocks from geopolitical events. The cost of basic inputs such as fertilizer and energy are expected to escalate, affecting transportation, processing, packaging, and distribution. At the same time, much of the fresh produce consumed in Cambodia is still imported. Local producers therefore have a window of opportunity to benefit from cost savings from competitive service providers who can successfully substitute imports by exploiting lower costs of domestic transportation and distribution.

ANNEX A. PERFORMANCE INDICATOR TRACKING TABLE (PITT)

The table below presents the targets and results for the last project year 5, to date, and life of project targets.

#	Indicator	Standard Indicator Number	Project Year 1 Target	Project Year 2 Target	Project Year 3 Target	Project Year 4 Target	Project Year 5 Target	Project Year 5 Results	Year 5 Achievement as Percent of Year 5 Target	LOP Target	LOP Results	LOP Achievement as Percent of LOP Target
1A	Value of incremental sales (collected at farm-level)	EG.3.2-19, FTF 4.5.2-23	\$1,426,613	\$3,567,358	\$6,497,010	\$11,000,000	\$16,509,019	\$16,809,598	102%	\$39,000,000	\$50,197,423	129%
1B	Value of annual sales of farms and firms	EG.3.2-26	N/A	\$5,000,000	\$7,500,000	\$12,000,000	\$17,500,000	\$24,509,212	140%	\$42,000,000	\$74,834,003	178%
2A	Number of ... for-profit private enterprises ...that applied improved management practices	EG.3.2-20, FTF 4.5.2-42	165	298	455	600	682	778	114%	2,200	2,466	112%
2B	Number of individuals in the agriculture system who have applied improved management practices ...	EG.3.2-24	N/A	N/A	2,000	3,200	4,800	7,532	157%	4,800	7,532	157%
3B	Percent of project-assisted buyers and suppliers who repeatedly applied at least one improved supply chain management practice	N/A	N/A	N/A	12%	20%	25%	38%	152%	25%	38%	152%
4	Number of firms ... that have increased profits or become financially self-sufficient	EG.3.2-21, FTF 4.5.2-43	90	157	233	300	350	363	104%	900	1,236	137%
5	Number of FTE jobs created	EG.3-9, FTF 4.5-2	94	275	635	700	344	382	111%	2,000	2,513	126%
6A	Value of new private sector investment in the agriculture sector...	N/A	\$624,000	\$1,524,000	\$3,324,000	\$4,500,000	\$3,154,000	\$13,663,764	433%	\$13,126,000	\$27,961,555	213%

#	Indicator	Standard Indicator Number	Project Year 1 Target	Project Year 2 Target	Project Year 3 Target	Project Year 4 Target	Project Year 5 Target	Project Year 5 Results	Year 5 Achievement as Percent of Year 5 Target	LOP Target	LOP Results	LOP Achievement as Percent of LOP Target
6B	Amount of investment mobilized for sustainable landscapes	EG.13-4	N/A	N/A	N/A	\$500,000	\$2,500,000	\$2,727,711	109%	\$3,000,000	\$3,372,118	112%
6C	Value of new U.S. government (USG) commitments and private sector investment	EG.3.1.14	N/A	N/A	\$3,324,000	\$6,900,000	\$3,154,000	\$13,663,764	529%	\$15,250,000	\$30,003,407	197%
7	Number of ... policies analyzed, consulted on, drafted or revised, approved and implemented	EG.3.1-12, FTF 4.5.1-24	1	3	4	5	4	4	100%	17	17	100%
8	Number of farmers and small-medium enterprises completing requirements for a climate smart agriculture certification (CamGAP, organic, or a focused quality assurance system ...) (Custom)	N/A	N/A	N/A	N/A	200	300	882	294%	500	1,105	221%
9	Number of farmers and small-medium enterprises adopting at least one climate smart agricultural practice	N/A	N/A	N/A	N/A	500	1,500	1,869	125%	2,000	2,969	148%
10A	Number of MSMEs, including farmers, receiving agricultural-related credit	EG.3.2-3	21	51	88	100	115	120	104%	375	503	134%
10B	Value of agriculture-related financing accessed	EG.3.2-27	N/A	N/A	\$115,000	\$2,415,000	\$2,655,000	\$2,972,214	112%	\$3,500,000	\$7,196,821	170%

#	Indicator	Standard Indicator Number	Project Year 1 Target	Project Year 2 Target	Project Year 3 Target	Project Year 4 Target	Project Year 5 Target	Project Year 5 Results	Year 5 Achievement as Percent of Year 5 Target	LOP Target	LOP Results	LOP Achievement as Percent of LOP Target
I 1A	Percentage of female participants ... to increase access to productive economic resources	GNDR-2	15%	20%	53%	54%	55%	55%	100%	55%	55%	100%
I 1B	Percentage of participants ... increase access to productive economic resources who are youth (15-29)	GFSS-24	10%	12%	15%	17%	20%	36%	180%	20%	36%	180%
12	Percentage of commercial partnership members who achieve at least 80% of their commercial partnership growth plan targets	N/A	20%	25%	30%	35%	35%	88%	251%	35%	88%	251%
13	Percentage of commercial partnerships maintained and/or expanded over time	N/A	65%	70%	75%	80%	85%	90%	106%	85%	90%	106%
14	Percentage of individuals adopting new innovative technology ...and/or management practices	N/A	50%	60%	65%	70%	75%	80%	107%	75%	80%	107%
15	Number of individuals participating in USG food security programs	EG.3.2	N/A	N/A	5,000	6,600	7,000	9,464	135%	7,000	9,464	135%

ANNEX B. IMPLEMENTATION OF IEE CONDITIONS

Sector	Potential Adverse Impacts and Risks	Mitigation Actions	Lessons Learned
Pesticides	Uncontrolled pesticide use can lead to unintended and harmful impacts on the local environment, pesticide users, and consumers of horticultural products. Impacts may include contamination of soil and water; toxicity to non-target aquatic or terrestrial species including those providing essential ecological functions such as pollinators; and disruption of natural pest controls leading to pest resurgence and resistance.	<ol style="list-style-type: none"> Developed the PERSUAP and training materials with appropriate messaging about safe pesticide use. Content included: <ul style="list-style-type: none"> Pesticide use in the context of Integrated Pest Management Appropriate pesticide types, doses, application timing, re-entry and pre-harvest intervals Safety and hygiene while handling pesticides during preparation, spraying, and post spray Appropriate use of Personal Protective Equipment (PPE) such as leak-proof sprayers, rubber boots and gloves, goggles, masks, etc. Pregnant women should not handle or be exposed to pesticide Proper PPE cleaning and maintenance Proper disposal of pesticides and packaging Organized training and refresher training courses to key value-chain actors in a position to propagate the information and 	<p>I. Song Muy, an agro-input dealership committed to promote safe use of pesticide among farmers and market actors.</p> <p>The Song Muy agro-input dealership was very active and closely collaborated with Harvest II. The dealership's owner and technical staff always attended capacity building events provided by the project. They gained significant knowledge about the SUAP particularly from the specialist, a volunteer from Corteva Agriscience through NCBA CLUSA's Farmer to Farmer programme. Here below are some key results accomplishments:</p> <ul style="list-style-type: none"> <i>Environmental improvement of the dealership store:</i> strictly followed all recommendations about safe storage of pesticides by installed ventilation for better air circulation; categorized the storage by levels of toxicity; have safety measures for breakage and spillage and for staff safety including eye washing station. <i>Demonstration of key SUAP messages:</i> the dealership received granting funding from Harvest II to help promoting SUAP through installation of 50 vegetable demonstrations. These demonstrations were used to impose key SUAP messages such as only apply pesticides in recommended list, strictly apply withholding period, and pesticide mode of action rotation to minimize risk of pesticide resistant. As a result, the dealership trained more than 250 farmers, 25 input retailers and 36 vegetable collectors. They have observed some significant changes among trained farmers and input retailers toward pesticide use such as most farmers understand about pesticide risk better so they often asked for safer pesticides and adopted some personal protective equipment (PPE), about 70% of trained input retailers followed recommendations to improve shop and storage conditions. <p><i>Challenges and lessons learned:</i></p> <ul style="list-style-type: none"> Farmers cannot adopt proper PPE because overall and respiratory masks are expensive and uncomfortable in a tropical climate. 30% of trained input retailers could not follow recommendations because they had small shops and family owned business with no staff or helper. Farmers still hesitated to use organic pesticides because the organic pesticides are

Sector	Potential Adverse Impacts and Risks	Mitigation Actions	Lessons Learned
		<p>positively influence the behavior of farmers, producer groups, and other value-chain actors.</p> <p>3. Provided grants to private sector actors to promote safe use of pesticide messages and encourage adoption among value chain actors. These grantees included Song Muy agro-input dealership, East West Seed, and AGID.</p>	<p>more expensive and can work effectively only when use preventatively but not for control.</p> <ul style="list-style-type: none"> Song Muy dealership is owned by a young and open-minded couple who were willing to try new things and work closely with farmers and market actors to provide honest and effective technical advice as well as input credits. Because of this practice, the dealership gained popularity and recognition very fast among farmers, market actors and input companies (both local and international). Song Muy dealership added a new shop and employed eight staff. <p>2. Grantee AGID, an agro-input distributor working to promote CamGAP certified mango.</p> <p>AGID noticed increasing demand for GAP-certified fresh mangoes for both domestic and international markets, which aligned with Cambodian government policy to promote CamGAP. Therefore, AGID opened a new subsidiary to export fresh mango overseas. To support the new subsidiary, AGID trained mango producers and supported them to get CamGAP certification and entered into contract farming agreements with some suppliers who received CamGAP certifications. Before implementing grant activities, AGID technical staff received PERSUAP training and documentation from Harvest II. Here below are some key accomplishments:</p> <ul style="list-style-type: none"> <i>Mango production manual development:</i> with technical support from Harvest II, AGID developed a mango production manual using Harvest II's list of recommended pesticides. The manual followed most PERSUAP recommendations, which mostly align with GAP guidelines—for example, farmers can use only selected locally registered pesticides that are less harmful to human and environment, they must wear proper PPE, have proper storage, practice good farm sanitation and maintain a clean environment, they must practice record keeping, and safely dispose of pesticide waste. The training manuals were disseminated among AGID trained mango producers. <i>CamGAP training and certifications:</i> worked closely with the General Directorate of Agriculture, MAFF to provide training to 131 mango producers. In addition, AGID provided an additional training-of-trainers course for these farmers after CamGAP guideline's training. 63 mango producers received CamGAP certifications and nine producers are still in process of obtaining their certifications.

Sector	Potential Adverse Impacts and Risks	Mitigation Actions	Lessons Learned
			<ul style="list-style-type: none"> • <i>Comparison between CamGAP certified mango farm and conventional mango farms:</i> overall, AGID observed that CamGAP certified mango farms are cleaner, more sanitized, and use fewer agro-inputs. <p><i>Challenges and lessons learned:</i></p> <ul style="list-style-type: none"> • <i>Burial of pesticide waste is not a long-term solution for mango farms:</i> The current recommendations in the PERSUAP, consistent with those from the Cambodian government for pesticide waste management, are to triple rinse, poke, and bury the waste in a hole underground or use a cement ring to collect the pesticide waste. Farmers understand about the harm from burning pesticide waste but burial is probably not a long term solution for mango plantation as they need to use bigger volume of pesticides. AGID is exploring piloting pesticide waste collection and maybe burning it in the incinerators for hazardous waste. • <i>GAP certification is quite expensive and a bit lengthy:</i> it costs an estimated USD\$500 for a two-year certification for a commercial farm bigger than 5 ha. The price includes training, evaluation, and sample analysis. AGID suggested that if CamGAP certified mango fetch 10-15% higher prices than conventionally produced mango, farmers should apply for the certification but currently there is little differentiation between different quality of mangoes in the market except for export where proof of adherence to quality standards is required. • <i>Lack of awareness about CamGAP among mango producers and domestic consumers:</i> AGID thinks that the main reason for slow adoption and recognition of CamGAP among producers and local consumers is due to lack of knowledge. AGID suggested that the government or CamGAP's office in particular should do more awareness raising campaigns. • <i>AGID's commitment to promote CamGAP:</i> despite these challenges, AGID believes that prices of GAP certified mango will increase in the near future and AGID will continue to encourage farmers to adopt GAP standards. It will continue to provide free training course but application for CamGAP certification will be the responsibility of individual mango producers. AGID thinks that Harvest II is the only programme that provides technical and financial support to promote adoption of CamGAP certification and this will have significant benefits in the near future since the Cambodian government has many free-trade

Sector	Potential Adverse Impacts and Risks	Mitigation Actions	Lessons Learned
			<p>agreements that have entered into force and mango has high international market demand with GAP required for exports.</p> <p>3. Grantee East West Seed about promotion of safe use of pesticide among vegetable producers and agro-input suppliers.</p> <p>East West Seed, an international seed company, was a very important grantee to promote improved vegetable production practices with producers, farm gate collectors and agro-input suppliers using demonstration farms, technical training, and direct coaching. East-West Seed (EWS) had all six of its technical staff trained by Harvest II on the EMMP and PERSUAP. Here below are some key accomplishments:</p> <ul style="list-style-type: none"> • <i>Setup proper demonstration and dissemination of key messages:</i> EWS strictly follows Harvest II recommendations covering: <ul style="list-style-type: none"> ○ Location selection for demonstration farms ○ Maintaining at least 1.5 meter distance from the demo farm to an open source of water, animal shelter, or household to prevent pesticide drift or set up a barrier to prevent pesticide drift ○ Recommended pesticides, SUAP information, PPE, pre-harvest interval, safe disposal of pesticide waste etc. <p>East West Seeds also produced technical crop guides and short education videos to disseminate this information among producers and market actors.</p> <ul style="list-style-type: none"> • <i>Pilot direct coaching programme to improve understanding of technical and SUAP among input retailers:</i> Understanding the key role played by input retailers in conveying SUAP messages to farmers, EWS piloted a coaching programme with selected input retailers in Siem Reap and Battambang provinces. EWS provided a flat screen EWS YouTube channel to display key technical, product knowledge, and SUAP messages. In addition, EWS had technical staff stand by one day per week at the input shop to provide technical assistance on behalf of the shop to farmer clients discussing their technical problems and offering solutions. The technical staff also advised the shop owner about the shop's environmental conditions, ventilation, tidying and cleaning procedures, proper input storage based on level of toxicity, and installation of some safety measures in case of pesticide breakage or spillage. The pilot programme was successful; it had 100% adoption from retailers in Battambang although only 60% from retailers in Siem Reap.

Sector	Potential Adverse Impacts and Risks	Mitigation Actions	Lessons Learned
			<p>Challenges and lessons learned:</p> <ul style="list-style-type: none"> • Despite the amount of effort required, farmers' adoption of SUAP is steadily increasing but slower than expected because farmers' decisions are often influenced by input retailers who tend to advise farmers to use any product that gives them more profit margin rather than what's right for problems faced by the farmer clients. • Farmers and input retailers still have limited knowledge about pesticide resistant management. It is difficult to convince farmers to practice pesticide mode of action rotation because if they see the efficacy from one pesticide, they are more likely to keep using the same one and not willing to try a new product that could address the same problems. • EWS still continues to follow all recommendations even though its grant activities with Harvest II were completed in October 2020. EWS also expanded its coaching programme for input retailers to other provinces including Kampong Cham, Kampong Speu and Takeo.
Support to SMEs (mostly food processing grantees)	Depending on the nature of an SME's business activity, the SME may have positive, negligible, or negative environmental impact. Even if the impact of individual SMEs is small, cumulative effects may be significant if the number of SMEs is high and/or if they are geographically concentrated. Adverse environmental impacts may include ecosystem degradation, including food and water sources; damage to the health of workers and nearby residents; and over-consumption of local resources. These impacts may create negative externalities including	<ol style="list-style-type: none"> 1. Developed an environmental screening checklist to categorize the types and seriousness of environmental impacts generated by SME activities. Checklist included chemical and hazardous waste, air pollution, water pollution, soil erosion, natural resource depletion, solid waste, odor, noise, health and safety. 2. Conducted regular environmental screening to note any emerging risks or concerns for mitigation actions or follow up progress of mitigation measures being implemented by SME partners. 3. Developed a detailed written mitigation/monitoring plan for partner SMEs identified as likely to have significant environmental impacts. 	<ul style="list-style-type: none"> • Environmental screening checklist was used regularly to review food processors for any potential risks. Misota Food Production (MFP) is among of the most environmentally conscious partners. The company is working hard to get recognized for its contribution to environmental safeguards. For instance, in 2021 the company received a Gold Medal for Green Industry Award from MISTI in collaboration with UNIDO. In the same year, the company received HACCP, ISO 9001 and ISO 22000 certifications. The company is planning to apply for ISO 14001, a specific standard for environmental management. • HCST received an in-kind grant for machinery to upgrade the processing from micro to medium level and become more environmentally friendly by using solar energy. The company is planning to export processed cashew nuts to Korea, the United States, and EU. HCST registered for a product registration mark for their products and plans to apply for HACCP and GMP certificates. • Veha Juice is a project partner (not a grantee) but received support from Harvest II on market and supply linkages, capacity building on food processing, support in accessing finance, and participation at marketing events and trade fairs. Veha is planning to produce fruit juice but has financial constraints during Covid 19 so has not yet been able to invest in juice making machinery. Their current production focus is on dried fruits such as mango, longan, and pineapple and pure drinking water. Veha Juice received support

Sector	Potential Adverse Impacts and Risks	Mitigation Actions	Lessons Learned
	higher costs of procuring resources and lost productivity due to sickness or injury.	4. Developed information and/or training material for Cleaner Production business principles to conserve resources, mitigate risks to humans and the environment, and increase resource efficiency through improved production.	<p>from Harvest II to register for a product registration mark and GMP certification. The company is planning to apply for HACCP and ISO in the near future so they can export to Korea and the US.</p> <ul style="list-style-type: none"> For more detail about lessons learned from food processing partners including MFP, HCST and Veba Juice, see below.
<p>Activities related to Agriculture:</p> <ul style="list-style-type: none"> Horticulture production advice, technical support, Training of Trainers, and direct training to project partners. Increasing resilience to climate change 	<ul style="list-style-type: none"> Agriculture can adversely affect a variety of ecosystems. Impacts may result from expanded production areas or from unsound practices on existing farms. In Harvest II areas, impacts may include deforestation; degradation of marginal lands, soils, wetlands, riparian areas, and habitats; siltation of water bodies; loss of biodiversity; introduction of non-native species; and increased greenhouse gas emissions. In some areas of the ZOI particularly Kampong Thom and Pursat, forest land has been cleared for agriculture purposes. 	<p>1. Promoted safe, environmentally-responsible horticultural produce that include the following practices:</p> <ul style="list-style-type: none"> Water conservation: use of water-efficient technology such as drip irrigation; minimizing the use of groundwater by promoting the capture of flood water and rainfall runoff; avoiding contaminating water sources through safe use of pesticides. Soil conservation: vegetative treatment measures such as green manure, cover crops, compost application, low tillage, diversifying monoculture cropping system. Specifically, the project may introduce practices such as: planting beans/peanuts between rows of cashew trees, and crop rotation and intercropping for pineapple production. Climate smart agriculture including drought and heat 	<p>Tasey AC, a grantee promoted protected agricultural practices and CamGAP certifications.</p> <p>Tasey AC has worked with Harvest II for about three years, first as a commercial partner and later as a grantee. Tasey AC promotes protected agriculture systems, nethouses and CamGAP certification. The AC believes that the technology can help to conserve water and improve soil fertility. They use a lot of compost, bio-char and many biological controls such as Trichoderma, and <i>Bacillus thuringiensis</i> and rice husk vinegar for insect repellence. Here are some key accomplishments:</p> <ul style="list-style-type: none"> Built 190 nethouses mostly located in Battambang province, trained a total of 180 vegetable producers on CamGAP and supported 47 producers to apply for certification. 15 producers received CamGAP certificates, and the AC is planning to support 43 more to apply for certification. CamGAP certification provides many advantages since CamGAP products use fewer inputs and can sell higher at a price than conventional vegetables. The guidelines require farmers to use only registered inputs and lots of organic matter, practice SUAP, and irrigation management as well as post-harvest handling, storage and transportation. The AC observed that with CamGAP practices, farmers use about 50-70% less pesticide compared with conventional practices. With support from Harvest II, the AC invested in 5 furnaces to produce bio-char and rice husk vinegar for selling to AC members at below-market prices. Most of the AC members also learned to produce trichoderma, naturally occur beneficial fungi, to enhance growth of the plant's root system and induce plant tolerance again fungal diseases. <p><i>Challenges and lessons learned:</i></p> <ul style="list-style-type: none"> The adoption of nethouse and CamGAP is growing slowly: the adoption is slow but steady because when it requires upfront investment, most farmers hesitate. Nethouses are expensive but most farmers can pay them off 2-3 years later and the nethouse itself will last for five to eight

Sector	Potential Adverse Impacts and Risks	Mitigation Actions	Lessons Learned
	<ul style="list-style-type: none"> - Cambodia is ranked one of the most sensitive countries to climate change. Projected changes include increased frequency and intensity of rain, drought, and high temperature stress. Longer, hotter dry seasons and shorter wet seasons with precipitation concentrated in more intense rainfall events. This is expected to cause major stress to horticulture production leading to yield loss and restrictions on growing periods. 	<p>resistant seeds/planting materials, protected agriculture and intelligent use of climate and weather information for crop planning and management.</p> <ol style="list-style-type: none"> 2. Developed information and/or training materials to promote CamGAP principles, organic production practices and PGS. 3. Made information and/or training on CamGAP principles, organic production practices and PGS available to key value-chain actors who are in a position to propagate the information and positively influence the behavior of farmers, producer groups, and other value-chain actors. 	<p>years. Farmers still have limited knowledge about CamGAP and do not like keeping farm records, which is one of the most important requirements.</p> <ul style="list-style-type: none"> • <i>Nethouse and CamGAP are two crucial tools to help farmers be more profitable and resilient:</i> despite the challenges, Tasey AC is still working hard to promote nethouses and CamGAP because the AC believes that farmers will need these two things to be more profitable and resilient through vegetable production. Therefore, to ease farmers' financial burden, the AC often connects potential suppliers to MFIs/banks that offer cheaper interest rates like the government bank ARDB. In addition, the AC also acts as a buyer and enters into contract farming agreement to buy back safe vegetables produced under nethouse conditions or CamGAP certified vegetables with higher market prices because the AC has already established a strong relationship with many premium buyers in Phnom Penh. • <i>The AC is quite aware about potential plastic pollution from nethouses and pesticide waste so the AC adopted some waste management practices:</i> The AC advises users to bury plastic underground or store it in one place; it never advises farmers to burn it unless it's at a remote location far away from water sources and farmland. Current technology has improved significantly, with better quality plastic, which is thinner but more durable. Tasey AC also embedded technical advice for production of vegetables under nethouse conditions, nethouse maintenance and promoting safe disposal of plastic and integrated pest management (IPM) practices. <p>Grantee Laey Baitong, a retailer of organic vegetables and fruits who promote contract farming with PGS producers</p> <p>In total, Laey Baitong works with 100 farmers whom they divided into two groups of 40 fully compliant PGS producers and 60 farmers in a conversion period. Normally, to be fully certified PGS producers require an evaluation that quite often involves the PGS founder, the Food and Agriculture Organization and the International Federation of Organic Agriculture Movements (FAO/IFOAM), NGOs, GDA, producers and buyers. The conversion period moving from conventional production using chemicals to PGS production takes about 12 months.</p>

Sector	Potential Adverse Impacts and Risks	Mitigation Actions	Lessons Learned
			<p>PGS is a type of organic standard, so no chemicals can be used unless they are organic or botanical pesticides. GPS producers need to produce compost themselves and if the volume is not enough, they can buy only from certified local producers. PGS standards already incorporate IPM and soil fertility improvement practices such as bio-char, trichoderma and Bokashi compost, etc.</p> <p><i>Challenges and lessons learned:</i></p> <ul style="list-style-type: none"> • <i>Challenges in PSG production:</i> farmers cannot produce enough organic fertilizers themselves because of the time required. In addition, their soil quality is poor and requires years to amend the soil quality. During this period, farmers can experience slow growth, lower yields, and higher risk of pest and diseases and organic pest control is not as effective as chemical control. • <i>Laey Baiting encourages more adoption of PGS:</i> to encourage farmers to adopt PGS, Laey Baitong offers higher prices; often, they enter into contract farming agreement where the price is fixed at 100-200% more than conventionally produced vegetables. In addition, some PGS producers have adopted a protected system such as nethouses to minimize pest and disease problems. • <i>Effective use of Harvest II grants funding:</i> it is time consuming and costly for Laey Baitong to provide training and close coaching to farmers directly. However, thanks to Harvest II's grant, Laey Baitong can work closely with farmers, which leads to more adoption despite Covid 19 constraints.
			<p>An organic cashew, Raksmei Leuk Kampos Kaksekor AC in Preah Vihea province</p> <p>The AC was established in 2014 and currently has 134 members. Among those 51 members who produce cashew nut organically on a total of 106ha of land, yield is about 102 tons per year. The AC buys some of those organic cashew nuts from its members at a price 20-30% than non-organic certified cashew nuts; members can sell the remaining nuts to other buyers. Harvest II connected this AC with many buyers including Kamya Agri Trade and Ample. Kamya Agri Trade signed a contract farming agreement with the AC and already provided a 10% deposit but can buy only about four tons of organic cashew nuts from the AC. The AC is a member of the Preah Vihea Meanchey Union of the AC (PMUAC) and there are 12 ACs under PMUAC umbrella and together they applied for Ecocert certification with support from IVY. Together, they paid an annual fee of \$10,000,</p>

Sector	Potential Adverse Impacts and Risks	Mitigation Actions	Lessons Learned
			<p>which is quite expensive for them but they believe that it is worth the price since this standard allows their cashew nuts to be exported to the EU, Japan, and the US.</p> <p>Challenges and lessons learned:</p> <ul style="list-style-type: none"> • <i>Organic cashew nut has a small market, lower yields and slow adoption:</i> the market for organic cashew nuts remains very small, so the AC can only sell about 20tons/year, about one-fifth of its total production capacity. Often when selling at a random market, the price of organic cashew nuts is even 10-15% less than conventionally produced cashew nuts. In addition, organic cashew nuts have in general about 20% lower yields than conventionally produced cashew nuts but often requires has more farm labor. These reasons lead to slow adoption of organic practice among cashew nut producers. • <i>Benefits of organic cashew nut practice:</i> the AC believes that organic production provides many other benefits particularly health. It also uses fewer agro-inputs, which reduces costs. The AC advises its members to have some cattle if they want to produce cashew nut organically because the cattle can graze on the grass and provide manure for the cashew nut as fertilizer. • <i>Certified organic cashew nuts can sell at a higher price and the market is expected to grow after the Covid 19 recovery:</i> the AC is optimistic that there will be more buyers like Kamya and Ample in the future and they know that these two companies are constructing their own processing facilities so hopefully there will be more demand for organic cashew nuts in the near future. Last year, the AC used to sell to CACC too but this year, CACC still haven't start buying yet and they hope the company will buy toward the end of the season.
			<p>Pichenda Fruit Production (PFP), who represent Pichenda AC promoting CamGAP certified longan production in Battambang province.</p> <p>The fruit processing company, established in 2021, just completed 75% of its processing facility. The company plans to produce dried and canned mango and longan. The owner is a member of Pichenda AC, has a CamGAP certified longan farm and an agro-input depot. The longan farm and input depot received technical support from Harvest II since the beginning of the project. Harvest II helped the company to develop a business plan and build technical capacity for processing.</p>

Sector	Potential Adverse Impacts and Risks	Mitigation Actions	Lessons Learned
			<p>Most longan producers of Pichenda AC received CamGAP training provided by GDA in collaboration with Harvest II under facilitation of CACA but only 16 members have received the certification. PFP will work closely with CACA to continue supporting more members to get the certifications. Currently, PFP buys mixed longan but in the near future, PFP will buy only CamGAP certified longan because PFP's buyers prefer to buy GAP certified longan.</p> <p><i>Challenges and lessons learned:</i></p> <ul style="list-style-type: none"> • The CamGAP certification process is lengthy and only valid for two years. Many farmers are still waiting for their certifications and the opening of international market for longan. Currently some farmers can still sell longan to Thai traders without any GAP certification so they still do not think it is necessary to invest in the certification. • The international market for fresh longan shrank during Covid 19, partly because international buyers imposed more requirements and because of the global supply chain crisis. The domestic market for fresh longan is very small so many farmers have paused longan production during this time. • GAP certified longan can use only locally registered pesticides and some products required for longan production are not locally available yet. • GAP certified farmers need to farm keep records and can use only locally registered pesticides with strict SUAP measures such as PPE and postharvest intervals, and proper pesticide waste disposal by burial of pesticide waste. So GAP certified farms use about 50% fewer pesticides compared with conventional farms. • To minimize pesticide exposure among farmers/ workers and efficacy, PFP is testing drones for pesticide use but it still cannot find suitable tactics for longan production yet. • Many buyers including PFP are willing to contribute to CamGAP certification for producers and CACA is planning to create a union of Cambodian longan so that CACA will continue to support the AC beyond Harvest II. • PFP on behalf of Pichenda AC indicated it appreciated Harvest II's supporting collaboration between longan market actors particularly between producers and buyers, raising more awareness of CamGAP certification, encouraging domestic processors like PFP and others who will mostly use lower grades of longan to convert into more valuable products like wine, syrup, and dried and canned products. These

Sector	Potential Adverse Impacts and Risks	Mitigation Actions	Lessons Learned
			activities can boost farmer confidence and willingness to invest in GAP and other standards to meet export market requirements.

ANNEX C. HARVEST II POLICY WORK, BY POLICY STAGE

#	Policy	Key Collaborators	Stage 1: Analysis	Stage 2: Consultation	Stage 3: Drafting	Stage 4: Approval	Stage 5: Implemented	Project Year When Target Achieved / Planned
1	Agricultural Sector Master Plan (ASMP) 2030 Crops (and Livestock)	MAFF and Harvest II	X	X	X			Year 1
2	Agribusiness Value Chain for Export Enhancement Chapter 8	MoC and Harvest II	X	X	X	X		Year 2
3	National Horticulture Policy 2019-2030	DHSC/GDA and Harvest II	X	X	X			Year 2
4	Contract Farming Law	DAI/MAFF and Harvest II	X	X	X			Year 2
5	Dispute Resolution (Prakas)	DAI/MAFF and Harvest II	X	X	X			Year 3
6	Contract Farming Policy	DAI/MAFF and Harvest II	X	X				Year 3
7	Draft Quality and Safety of Agricultural Products Law	DAI/MAFF and Harvest II	Completed before Harvest II		X			Year 3
8	Cashew Policy	MoC, HEKS and Harvest II	X	X	X			Year 3
9	Plant Protection and Quarantine Strategic Plan 2022-2027	DPPSPS/GDA and Harvest II	X	X	X	X		Year 4
10	Longan Value Chain Strategic Plan for Export Enhancement	GDA/MAFF and Harvest II	X	X	X			Year 4
11	Mango Value Chain Strategic Plan for Export Enhancement	GDA/MAFF and Harvest II	X	X	X			Year 4
12	Pepper Value Chain Strategic Plan for Export Enhancement	GDA/MAFF and Harvest II	X	X	X			Year 4
13	Durian Value Chain Strategic Plan for Export Enhancement	GDA/MAFF and Harvest II	X	X	X			Year 4
14	Yellow Banana Value Chain Strategic Plan for Export Enhancement	GDA/MAFF and Harvest II	X	X	X			Year 5
15	Avocado Value Chain Strategic Plan for Export Enhancement	GDA/MAFF and Harvest II	X	X	X			Year 5
16	Seed Movement Management Prakas	DPPSPS/GDA and Harvest II	X	X	X			Year 5
17	Investment on Agricultural Processing Guideline	DAI/MAFF and Harvest II	X	X	X			Year 5

ANNEX D.I. OVERVIEW OF HARVEST II GRANTS

Program	Grantee	Objective	Disbursed Amount (US\$)
Climate Change Adaptation (completed)	Aphivat Strey International*	Improve use of climate information in Battambang	83,536
	International Institute of Rural Reconstruction*	Improve use of climate information in Siem Reap, Pursat	87,859
	Total		171,395
Horticultural Solutions	AMK Microfinance Institution PLC	E-Farmer Support App Activity	83,420
	East-West Seed (Cambodia) Company Limited (EWS)	Transforming Vegetable Markets in Cambodia Activity	100,000
	Natural Agriculture Village (NAV)	Pilot effort to expand the market for higher-quality, locally produced vegetables	53,173
	AGID	Promoting Farm Management Services and Contract Farming	61,156
	Kiu (Cambodia) Co., Ltd.	Business management program for horticulture sector actors	87,750
	Krassna Management Co., Ltd	Turmeric Value Chain Management and Buy Back Scheme	41,257
	Cambodia Microfinance Association (CMA)	MFI Financial Literacy Coaching Program	25,750
	Husk Ventures (Cambodia) Co., Ltd	Promotion of biochar products to improve production in horticulture value chains	50,668
	East-West Seed (Cambodia) Company Limited (EWS)	Transforming Vegetable Markets in Cambodia Activity, Phase II	90,000
	AMK Microfinance PLC	Pilot three supply chain finance models to support horticulture sector actors	70,750
	CACC	Export processed cashew nuts to European market	49,476
	Song Mouy	Improving Input Quality and Technical Service.	50,448
	Husk Ventures (Cambodia) Co., Ltd	Increase yields of safe, locally grown vegetables through training in the use of carbon-based fertilizer and wood vinegar	72,627
	Confirel Co., Ltd	Developing and marketing new mango products for local and international market	65,517
	Laey Baitong	Increase sales of organic vegetables by improving supply chain and establishing franchise retail outlets	47,300

Program	Grantee	Objective	Disbursed Amount (US\$)
	Cambodia Agricultural Cooperative Alliance (CACA)	Improving the quality and productivity of longan through CamGAP training	70,000
	Misota Food Import Export Co., Ltd	Converting the waste from the mango processing into commercial by-products and expanding sales of processed fruits	75,085
	Agribuddy Co., Ltd.	Improving red chili and mango market linkages	52,660
	Krassna Management Co., Ltd	Expand processed turmeric for export and prepare for eco-certification	42,000
	Leang Leng Enterprise	Expanding sales of processed chili sauces	66,839
	Hung Hiep (Cambodia) Co., Ltd	Expand their purchasing, packaging, and export of processed foods, including pepper, cashew, and dried fruits	10,000
	CSL Enterprise (CSL)	Increase sales of processed fruit and vegetable products	56,175
	Seasonfresh (Cambodia) Co., Ltd	Improve the quality and productivity of off-season mango through CamGAP training	59,952
	Banhji FinTech Co., Ltd (Banhji)	Introduce MSMEs including ACs in the horticulture sector to Banhji's Fin Tech platform, which will improve their financial management and access to finance	43,248
	Song Do Foods (Cambodia) Co., Ltd	Expand Cambodian organic raw cashew nut production for export	29,500
	AGID	Expand production of CamGAP certified mango for export	57,890
	Aliments	Expand safe vegetable production for consistent year-round supply	69,351
	Kamya AgriTrade Co., Ltd.	Increasing production and processing of organic cashew	57,815
	Ringacam Enterprise	Increasing production and marketing of turmeric and other crops	70,000
	Cashew nut Association of Cambodia (CAC)	Develop and adopt a traceability system that will attract international and local buyers	74,465
	Tasey Samaki Agricultural Cooperative (TSAC)	Expand production of safe vegetables and provision of net-house establishment services	70,000
	Chamka Kampong Lpov (CKL)	Increase production of safe vegetables through use of greenhouses, climate smart agriculture practices, and improved packhouse management	68,308
	Azaylla Cambodia Co., Ltd	Pilot testing an AI-based quality control and traceability system for a variety of fruits and vegetables	50,000

Program	Grantee	Objective	Disbursed Amount (US\$)
	Total		1,972,581
Investment Accelerator	Misota Food Import Export Co., Ltd. *	Invest in dried fruit processing	96,750
	Santana Agro Products Co., Ltd. *	Invest in cashew nut processing	96,700
	Twin AgriTech Co., Ltd *	Invest in compost and vermicompost fertilizers	42,493
	Chey Sambo Cashew Nut Processing Handicraft (CSC)	Invest in processing Cambodian cashew's production facility for the international market	31,346
	AgriOn Cambodia Co., Ltd	Invest in safe, high quality Cambodian vegetables/fruits for local and international markets	35,000
	Kirirom Food Production Co., Ltd (KFP)	Invest in dried mango kernel	95,500
	Yamato Green	Incentivize Yamato Green's establishment of greenhouses and cold storage facilities to improve safe vegetable production, and to store, wash, cut and pack vegetables/semi-processed produce to sell in domestic and international markets	28,590
	Richfarm Asia Co., Ltd.	Expand safe mango production and increase exports by developing a demonstration farm to showcase improved production, post-harvest handling, and packaging practices	68,161
	KCCV Plantation Co., Ltd.	Process longan and other fruits to sell in local and international markets	10,000
	Total		504,540
Testing Innovations in Vegetable Subsector	SPIEN	Value addition for vegetable producers through contract farming and a traceability system	24,140
	Total		24,140
Logistics and Export Facilitation	Cambodia Pepper and Spices Federation	Participation in Middle East Organic and Natural Products Expo Dubai	62,005
	Navita Healthy Food & Beverages Co., Ltd. (Navita)	Production and packaging of processed products for local and export markets	57,651
	Puzzle Solution Co., Ltd.	Initiate innovative logistics solution of less than container loading (LCL) and establish a new cold storage warehouse for Cambodian exporters	50,656
	Generation One Co., Ltd.	Increase Export of Cambodian products through an established overseas network	37,087
	Grove Fruit Growers Co., Ltd.	Expand capacity for mango export by expanding suppliers, investing in equipment, and training workers	31,056
	Handcrafted Cashew Nuts Stung Treng (HCST)	Increase processing capacity and quality to meet standards for local and international markets	74,760
	Ample Agro Product Co., Ltd. (Ample)	Expand production and export of fresh and dried agricultural products	73,806
	SHE Agrocarn Products Co., Ltd.	Helping agro-processors participate in domestic and international markets	61,600
	Accelerinno Tech Co., Ltd.	Link producers and processors to a new online market channel	35,180

Program	Grantee	Objective	Disbursed Amount (US\$)
	Peng Seng Doctor Water Co., Ltd.	Provide labeling and packaging services and warehouse arrangements to MSMEs	18,801
	Kenko Shoku (Cambodia) Co., Ltd.	Improve greenhouse vegetable production, warehouse facilities, cleaning and packaging	64,450
	Ponlei Thamacheat	Improve supply chain for its health foods and cosmetic products	31,420
	Kokopon (Cambodia) Co., Ltd.	Improve and expand access to e-commerce platform	50,000
	Total		648,471
Grand Total			\$3,321,127

ANNEX D2. GRANTEE ACCOMPLISHMENTS

Grantee	Accomplishments
1. Aphivat Strey International	<ul style="list-style-type: none"> 1,081 producers trained in climate friendly practices 855 producers (79%) demonstrated actions to adopt climate change practices
2. International Institute of Rural Reconstruction	<ul style="list-style-type: none"> 1,109 producers trained in climate friendly practices 534 producers (48%) demonstrated actions to adopt climate change practices
3. AMK Microfinance PLC	<ul style="list-style-type: none"> Finalized and deployed Tonlesap Seller App for testing Registered 900 ZOI horticulture farmers on TonleSap App, 227 adopted improved practices as a result of accessing the app's agronomic information 106 input supply companies, ACs, and buyers uploaded their products on TonleSap App TonleSap Seller App successfully launched to help agriculture sellers and service providers manage sales, receive orders, and advertise and post products
4. East-West Seed (Cambodia)	<ul style="list-style-type: none"> 1,211 farmers (736 women, 166 youth) adopted improved production practices 44 market actors (7 input supplier companies, 7 input dealers, 15 agro-input retailers, 15 vegetable collectors) trained on the proper use of EWS inputs and seed varieties
5. Misota Food Import Export Co., Ltd.	<ul style="list-style-type: none"> Surpassed investment target specified in grant agreement, with total investment of \$667,775 Created 92 new full-time equivalent (FTE) jobs to date Misota added new processing line to process dried orange (sourcing from Harvest II orange collector in Pursat) to export to local and Thai markets.
6. Santana Agro Products Co., Ltd.	<ul style="list-style-type: none"> Surpassed investment target specified in grant agreement, with investment totaling 1,112,996. This quarter, Santana expanded their cashew drying facility and purchased new machinery, valued at 420,203. As a result, Santana generated investment of 1,979,028 to date, including capital investment of 1,533,199 (in the cashew processing and drying facility) and 445,829 in working capital Created additional 75 new FTE jobs bringing total of 159 new jobs created during the life of the grant project with Harvest II During this beginning of harvest season, Santana purchased raw cashew nuts of 79,085 from 55 suppliers in Preah Vihear and Kampong Thom provinces; bringing total value of farm-level sales of 445,829 to date Exported 72 tons of semi-processed cashew to South Korea and other markets Began piloting contract farming with 8 ACs
7. Natural Agriculture Village (NAV)	<ul style="list-style-type: none"> Established distribution store named "Green Gold" located in Daem Kor market Supported 98 farmers in applying improved practices, such as growing diversified crops, producing compost fertilizer, applying husk biochar for soil enrichment, and proper use and recording of chemical fertilizers and pesticides Generated firm-level sales of \$168,753 by purchasing GAP-aligned fruits and vegetable produces including cabbage, cauliflowers, asparagus, pumpkin, tomato, cucumber, ridge gourd, papaya, orange, pomelo, and lemon NAV generated firm-level sales of \$321,696 by purchasing GAP-aligned fruits and vegetables from farmers adopting GAP-aligned practices 799,002 of farm-level sales generated by 136 vegetable farmers (in Pursat, Battambang and Siem Reap) trained by NAV to improve production practices Five retail markets and traders sourced vegetables from NAV trained farmers.
8. Angkor Green Investment and Development Co., Ltd.	<ul style="list-style-type: none"> Provided technical training for 9 participants on GAP and mango production techniques, including topics such as soil, fertilizer, nutrition management, and harvesting, to meet buyers' requirements Provided technical assistance on mango production and harvesting with 3 contract farmers and another 25 farmers who apply company techniques and products Purchased 34 tons of fresh mango from contracted farmer for export to Thailand

Grantee	Accomplishments
	<ul style="list-style-type: none"> • Provide technical assistance to 96 mango producers • 62 producers adopted technical improved practices • Generated farm-level sales 305,280 • Generated firm-level sales 198,150 to 3 international buyers (Westfood, Timfood, and Thailand middleman) and one local buyer is Sun Vutha
9. KiU (Cambodia) Co., Ltd	<ul style="list-style-type: none"> • Completed simplifying and localizing point of sales to attract MSMEs to use this digital business management platform • Partnered with AMK to introduce special product packages for existing and potential clients who can eventually access AMK financing through KiU's credit scoring system • Completed introductions on KiU's business management platform (BMP) and POS to 47 MSMEs and farmers • This quarter, KiU continued introducing their digital system through online platforms to MSMEs and farmers in the four provinces • 100 micro-merchants and farmers signed up for KiU POS application • 114 SMEs signed up for KiU BMP
10. Angkor Harvest Co., Ltd.	<ul style="list-style-type: none"> • Completed recruiting staff to operate mango business • Environment Impact Assessment proposal approved by Ministry of Environment, with study results in February 2020 • First successful exported of fresh mango to Freshmart Singapore Pte Ltd.
11. Krassna Management Co., Ltd.	<ul style="list-style-type: none"> • Distributed quality turmeric rhizome seeds to 70 key farmers that received training. The germination rate is low, as planting occurred late in the season and the rains did not come as hoped; a significant harvest is unlikely. • Completed training on turmeric production and post-harvest handling practices to 325 farmers in Pursat province • 31% of 325 turmeric farmers have adopted the improved practices • Purchased 20 tons of fresh turmeric and processed 3.4 tons for export to Vietnam
12. Cambodia Microfinance Association (CMA)	<ul style="list-style-type: none"> • Registered and signed memoranda of understanding (MoUs) with 6 MFIs for participation in CAFE training program • Completed training on Training of Coaches (TOC) to 51 MFI staff from 5 MFIs. • CMA's five MFI partners implemented client coaching programs
13. Husk Ventures (Cambodia) Co., Ltd.	<ul style="list-style-type: none"> • Developed 5 videos (including <i>from farm to table and carbon farming</i>) • Biochar products value of 1,675 have been sold in Harvest II ZOI • Signed an MoU with FAEC for nationwide distribution agreement of biochar products with 72 AC members, 62,000 farmers in 7 provinces across Cambodia • Increased sales of biochar to approximately 5 tons due to increasing demands from input dealers and farmers, especially in Kandal province
14. SPIEN	<ul style="list-style-type: none"> • Signed contract agreements with eco-farm suppliers, in cooperation with GRET Cambodia, and with Khmer Organic Cooperation (KOC) for product supply • Provided training on post-harvest management to 19 farmers (9 women) • Purchased 3 tons from eco-farm members at 10% premium over market price • Partnered with KOC market retailer to sell products • Completed consumer survey to 180 samples (including 60 observations and 120 individual survey) at KOC market retailer • Completed final report including survey findings and commercial viability summary
15. East-West Seed (Cambodia) Co., Ltd., second grant	<ul style="list-style-type: none"> • Formed 65 core farmers' groups • Selected and set up 125 demonstration farms (40 demos from key farmers), following PERSUAP and key farmer selection criteria • Developed 4 videos for social media to demonstrate at EWS's input dealers in Harvest II four target provinces • 335 farmers received production trainings at field days

Grantee	Accomplishments
	<ul style="list-style-type: none"> Collected farm-level sales of 784,131 from 46 farmer suppliers; and firm-level sales of 1,011,317 generated by EWS's vegetable collectors who sourced vegetables from these farmers
16. Twin AgriTech Co., Ltd	<ul style="list-style-type: none"> Purchase a generator in Cambodia Recruited 11 new, local staff this quarter Completed procurement of bio-digester machinery, and successfully installed it for operation Made \$213,860 investment setting up new equipment and machinery. Twin Agri achieved initial compost sales of 43,169 in Quarter 2 of Fiscal Year 2021 (FY21 Q2).
17. AMK Microfinance Institution PLC (2 nd grant)	<ul style="list-style-type: none"> Completed recruitment of 3 staff and formed structure. Provided training on SCF models to AMK staff. Prepared the event to introduce SCF to at least 15 private sector actors. Identified 63 prospective MSMEs and organized market event to 16 MSMEs. Disbursed \$1,340,022 financing to four market actors through SCF model. Disbursed loan of \$305,000 to three market actors through SCF model. Disbursed loan to one MSME
18. Azaylla Cambodia Co., Ltd (1 st grant)	<ul style="list-style-type: none"> Created five new jobs to support cold chain operation Generated farm-level sales of 139,795 and generated firm-level sales of 187,250 from mixed vegetables, mixed fruits, orange, and mango Azaylla was not able to reach investment plan due to the reluctance of international shareholders to invest as they originally agreed Azaylla is not able to seek new investors and expand capital investment to establish new equipment on current cleaning and packaging facility. Azaylla shifts the investment plan to increase working capital to source products from current partners and new processors to distribute their products to supermarkets and retail markets in Phnom Penh.
19. Cambodia Agriculture Cooperative Corporation Plc (CACC)	<ul style="list-style-type: none"> Completed development of supply chain model to supply organic cashew from a few ACs Completed development Internal control system for organic cashew traceability Completed development organic certification system guidance Exported Cambodian cashew to Netherlands about 12,632 kg, valued at 95,649 132 cashew producers adopting improved supply chain management practices in compliance with organic certification and post-harvest handling management Generated farm-level sales of 67,110 from purchasing of organic cashew. Generated additional firm-level sales of 59,400 from sales of processed organic cashew to international market.
20. Chey Sambo Cashew Nut Processing Handicraft (CSC)	<ul style="list-style-type: none"> CSC owner In Laihourt recruited 43 local staff in her community Made investment of \$151,739 including factory facilities to support in processing cashew Processed existing inventory and generated \$225,311 in firm-level sales
21. AgriOn Cambodia	<ul style="list-style-type: none"> Kicked-off this investment accelerator grant Recruited 38 new staff by FY21 Q3 Completed procurement of 221,469 in FY21 Q2 such as cold-storage facilities Made contract agreement to ensure sustain supply at farm level, AgriOn supported vegetable producers by advancing cash of 50% to 18 ACs valued 25,427
22. Song Mouy	<ul style="list-style-type: none"> Completed development technical training and extension material Made investment of 234,500 from sales of input credit and to expand warehouse Provided supply credit to input retailers and vegetable collectors of 90,763 Provided 45 technical trainings to farmers in total. Conducted exposure visits to demonstration farm. 27 vegetable collectors adopted improved supply chain management.

Grantee	Accomplishments
	<ul style="list-style-type: none"> Generated 810,361 in farm-level sales and 974,531 in firm-level sales.
23. Husk Ventures (Cambodia), second grant	<ul style="list-style-type: none"> Completed initial workplan and recruited new staff this quarter Selected 25 producers (as control and treatment group) to test product Developed IEC materials and distributed to relevant stakeholders and farmers Registered carbon-based fertilizer and wood vinegar Developed technical dossier regarding CBF and wood vinegar Provided one online training to farmers, collectors and other stakeholder who are 81 interested in participating Hosted exposure visits to 7 demonstration farms Produced 3 promotional videos for new products (carbon-based fertilizer and wood vinegar) Provided technical training for 141 farmers.
24. Confirel	<ul style="list-style-type: none"> Recruited 16 staff Signed contract agreements with 60 mango producers 70 actors adopted improved supply chain management practices. Generated farm sales from contracted farmers of 20,000 Registered mango puree and mango chips at Ministry of Industry, Science, Technology and Innovation Submitted documents for HACCP and 2 additional certificates Launched 2 promotional events for new products: mango puree, chips, and organic fresh mango. New products were purchased by at least 5 retailers. Achieved over \$40,000 in farm-level sales.
25. Laey Baitong	<ul style="list-style-type: none"> Signed purchase agreements with 40 PGS farmers 108 PGS farmers received training Purchased 16 tons valued at 12,288 resulting in sales of 16,382 Establish one small-scale post-harvest facility for cleaning, packaging, and pre-cooling storage managed by franchisee Set up 100 demonstration farms with PGS standards Conducted additional 10 trainings on organic/PGS requirements Established 4 outlets to sell organic vegetables using franchise model. Signed contract agreement with 8 retail outlets to sell organic vegetables using franchise model.
26. Kirirom Food Production Co., Ltd. (KFP)	<ul style="list-style-type: none"> Purchased 50,000 tons valued at 813,551 resulting in sales of 1,923,500 generated from processed mango to Thailand, and Philippines Generated 216,900 in farm-level sales and 2,892,522 in firm-level sales in the FY2021 Q3. Completed \$479,000 investment to establish mango kernel processing line and cold storage facility. Created 40 new FTE jobs
27. Cambodia Agriculture Cooperative Alliance (CACA)	<ul style="list-style-type: none"> Completed initial workplan and recruited 3 staff this quarter Developed internal control system for Cam-GAP longan applicants Submitted Cam-GAP longan manual to GDA Formed 30 farmer clusters Signed purchasing agreements with 7 domestic and international buyers. Established Cambodia Longan Agricultural Union (CLAU) Supported 270 farmers to complete CamGAP requirements. Aided 30 longan producer clusters to apply for CamGAP certification. Achieved over \$1.19 million in farm-level sales.
28. Yamato Green Co., Ltd.	<ul style="list-style-type: none"> Invested \$114,392.24 on machinery. Constructed 3 new greenhouses in Mondulkiri province. Created 8 new FTE jobs.

Grantee	Accomplishments
29. Misota Food Import Export Co., Ltd	<ul style="list-style-type: none"> Completed initial workplan and recruited 14 staff this quarter. Built capacity to internal staff on QA, QC, R&D, and marketing. Promoted new product in supermarkets such as AEON and Chip Mong. Signed 5 purchase agreements with mango and pineapple collectors. Organized a business roundtable event. Made purchase agreements with 13 commercial outlets and minimarts. Dried fruits, fruit powders, fruit juices and beverages are HALAL standard certified. Invested over \$100k in distribution, marketing, and processing equipment for fruit juices. Generated \$73,591 in farm-level sales and over \$60,000 in firm-level sales.
30. DT Enterprise Co., Ltd.	<ul style="list-style-type: none"> Processing facilities have been ordered, plan to install in next quarter. DT's investment plan for mango processing facility has been put on hold due to the lack of capital investment from their shareholder(s) in 2021.
31. Agribuddy Co., Ltd.	<ul style="list-style-type: none"> Completed initial workplan and recruited 12 staff this quarter Provide technical training to 20 producers. Installed drip irrigation system on 21 hectares chili production for 18 producers. 3 partnerships agreements were signed between mango buyers and suppliers via Agribuddy. 21 farmers (16 chili and 5 mango farmers) adopted improved business practices with the support from Agribuddy. Generated 88,645 in farm-level sales and generated 109,575 in firm-level sales.
32. Krassna Management	<ul style="list-style-type: none"> Completed initial workplan and recruited 12 staff this quarter Developed production strategy and business plan for turmeric 120 turmeric farmers were selected for sustainable model demonstration farms. 150 farmers were trained on seed selection. 120 farmers were trained on production techniques and post-harvest handling practices. 120 farmers received technical assistances. Executed purchasing agreements with 5 collectors.
33. Leang Leng Enterprise	<ul style="list-style-type: none"> Invested 99,600 on new chili processing equipment and machines. 70 staff trained on Cambodia Standard compliance, marketing strategy, and sale techniques. Registered the new chili sauce products to Cambodia Quality Products standard. Signed purchasing agreements with 6 distributors to distribute LLE's products. Conducted training with 64 chili farmers in Battambang. This quarter generated \$22,514 which accumulated to \$101,562 in total farm-level sales. This quarter generated \$182,011 which accumulated to 672,023 in total firm-level sales.
34. Richfarm Asia Co., Ltd.	<ul style="list-style-type: none"> Procured equipment to equip in demonstration farm Completed 340,805 investment on setting up irrigation system and install solar panel-battery on 40 hectares mango plantation. Recruited 40 new full-time and over 100 part-time workers. Generated 223,135 in farm-level sales of mango.
35. Hung Hiep (Cambodia) Co., Ltd.	<ul style="list-style-type: none"> Completed initial workplan Recruited 3 staff.
36. CSL Enterprise (CSL)	<ul style="list-style-type: none"> 4 purchasing contracts signed with collectors Received purchasing orders from 6 buyers. Created 10 new FTE jobs. Provided training for 130 farmers on quality requirements and specifications to comply with CSL's needs. 60 collectors and farmers adopted improved supply chain management practices with CSL's assistances.
37. Seasonfresh (Cambodia)	<ul style="list-style-type: none"> Developed post-harvest management and handling extension materials for mango workers. 210 mango workers trained on post-harvest management and handling.

Grantee	Accomplishments
	<ul style="list-style-type: none"> • 11 mango clusters (with 558 farmers) are formed in order to receive CamGAP training. • Conducted trainings on CamGAP requirements for hundreds of farmers. • 461 farmers completed and applied for CamGAP certification. • Generated over \$1.4 million in farm-level sales • Generated over \$1.3 million in firm-level sales.
38. Banhji FinTech Co., Ltd.	<ul style="list-style-type: none"> • Completed initial workplan and recruited 10 staffs • Signed partnership agreements with 3 banks/MFI • Conducted software trainings for 84 MSMEs. • Conducted financial literacy trainings for 29 MSMEs. • Registered 86 MSMEs to Banhji's financial software and provided a one-year financial statement report.
39. K.C.C.V. Plantation Co., Ltd.	<ul style="list-style-type: none"> • Kicked-off this Investment Accelerator Grant. • Created 52 new jobs.
40. Song Do Foods (Cambodia) Co., Ltd.	<ul style="list-style-type: none"> • Developed two new software programs, RTT for traceability and RFO for farmer optimization. Over 836 farmers have been registered into RFO. • Invested over \$63,000 mobilized for sustainable landscapes, associated in organic cashew. • Received sales contracts with 6 international buyers from the U.S. and Canada.
41. East-West Seed (Cambodia), Co., Ltd., third grant	<ul style="list-style-type: none"> • EWS cannot issue tax invoice with VAT because it would be inconsistent with how they handle other grants. The alternative, for Abt to withhold taxes, is also inconsistent with how they view their work under grants.
42. Angkor Green Investment and Development Co., Ltd.	<ul style="list-style-type: none"> • Organized virtual awareness workshops with 59 participants attended. • 170 mango producers and collectors were trained on CamGAP and post-harvest handlings. • Provided assistances for 40 mango producers to obtain CamGAP certificates. • Supported 30 market actors to access to financial credits. • Publish a handbook of off-season mango production with CamGAP compliant. • Aided 67 mango producers to receive CamGAP certifications. • AGID with partnered input-dealers invested over \$250,000 in sustainable landscape. • 100 farmers adopted one or more climate smart agriculture practices facilitated by AGID.
43. Hyundai Agro (Cambodia) Co., Ltd.	<ul style="list-style-type: none"> • Hyundai Agro's investment plan for Vapor Heat Treatment (VHT) expansion has been put on hold and an alternative investment plan in dried mango facility is unlikely to be made within this year.
44. Aliments	<ul style="list-style-type: none"> • Identified and recruited 50 farmers who were interested in trainings and signing agreements with Aliments. • Established five new greenhouses equipped with drip irrigation system in Battambang. • 134 farmers attended PGS trainings conducted by Aliments. • Signed contract farming agreements with 25 farmers. • Supported 30 farmers to adopt PGS. • Linked with 17 local buyers including schools, HoReCa, and retail outlets to supply vegetable. • Generated \$425,131 in farm-level sales. • Generated \$716,690 firm-level sales for both fresh produces and processed products.
45. Kamy AgriTrade Co., Ltd.	<ul style="list-style-type: none"> • Completed initial workplan and recruited 9 staffs. • Hosted demonstration farm-day events to certified organic farms for farmers. • Created two new products from cashew nuts (cashew milk and cashew cheese). • Provided technical trainings on organic cashew farming to more than 400 farmers. • Conducted assessment on FairTrade standard readiness on 12 ACs. • Generated over \$22,000 on farm-level sales.
46. Ringacam	<ul style="list-style-type: none"> • Conducted a strategic meeting with producers to discuss project activities. • 121 turmeric farmers were trained on CamGAP. • Signed purchasing agreement with 60 producers. • Conducted lab testing on soil nutrient and turmeric seed quality.

Grantee	Accomplishments
	<ul style="list-style-type: none"> • Provided post-harvest handlings for 120 turmeric farmers. • Supported 60 farmers to apply for CamGAP certificate. • Invested more than \$20,000 in processing equipment to comply with HACCP and GMP standards. • Supported 80 turmeric producers to adopt climate smart agriculture practices. • Hosted a product launching event for buyers and consumers in Phnom Penh. • Generated \$88,732 in farm-level sales and \$130,000 in firm-level sales.
47. Cashew nut Association of Cambodia (CAC)	<ul style="list-style-type: none"> • Recruited 20 new field officers. • Developed new traceability system for cashew. • Trained 20 field officers and 2 project coordinators with the new digital platform. • Registered 800 cashew producers into the system. • Created profiles and procurement baseline data for 800 producers in the traceability system. • Provided trainings on the new digital platform for 965 farmers. • Supported 800 famers to adopt climate smart agriculture practices. • Linked 5 domestic buyers to buy raw cashew nuts (RCN) from farmers.
48. Tasey Samaki Agricultural Cooperative (TSAC)	<ul style="list-style-type: none"> • Signed purchasing agreements with 6 ACs. • Invested in transportation facilities including 1 regular truck, 2 cool trucks, and 2 cargo van tricycles. • Established additional 30 new vegetable net-houses, which makes it 60 net-houses in total, equipped with drip irrigation system. • Conducted CamGAP training with 40 key producers. • Provided capacity building on financial literacy to leaders of 6 ACs. • 193 farmers were trained on CamGAP requirement. • Facilitated farmers to access \$67,000 financial credit through partnership with banks and microfinance institutes. • Generated over \$120,000 in farm-level sales, and over \$160,000 in firm-level sales.
49. Chamka Kampong Lpov (CKL)	<ul style="list-style-type: none"> • Developed CamGAP aligned modules • Established 13 new vegetable greenhouses on model farm. • Signed purchase agreement with 6 buyers • Hosted two exposure visits with more than 80 producers participated. • Signed purchasing agreement with 40 greenhouse producers. • Provided trainings on production techniques in greenhouse for 40 producers. • Provided net-house establishment services to 30 producers. • Invested \$143,761 in net-house establishment for own farms as well as for clients. • Provided 480 technical assistances on production techniques for 40 producers. • Generated more than \$120,000 in farm-level sales of safe vegetables. • Generated \$163,912 in firm-level sales of safe vegetables.
50. Azaylla (Cambodia) Co., Ltd.	<ul style="list-style-type: none"> • Developed a new AI-based system for produces quality control and traceability. • Signed partnership agreements with 15 farmers. • Signed business agreements with 3 processors. • Provided training for staff on how to operate the AI-based quality control and traceability system. • AI-based quality control and traceability system goes live on web-based platform and mobile applications for both iOS and Android. • Piloted the new AI systems on 5 farms. • Signed purchasing agreements with 5 buyers including 2 new buyers. • Generated over \$150,000 farm-level sales of fresh vegetables. • Generated over \$195,000 firm-level sales of fresh produces. • Generated more than \$50,000 in purchases of processed products from partnered processors. • Generated more than \$55,000 in sales of processed products.

Grantee	Accomplishments
51. Cambodia Pepper and Spices Federation (CPSF)	<ul style="list-style-type: none"> • Identified 25 Cambodian companies with potential to reach the Middle Eastern markets. • Signed agreements with 2 service provider companies to create microsite and facilitate for the Organic & Natural Expo Dubai 2021, and to provided trainings on product quality control and development, GMP, and HACCP. • Facilitated a 2-day Digital Trade Expo for the 25 companies. • Provided trainings on GMP/HACCP and Certificate of Conformity (CoC) for the listed Cambodia companies. • Provided direct assistance for 25 companies in co-developing an action plan for export.
52. Navita Healthy Food & Beverages Co., Ltd. (Navita)	<ul style="list-style-type: none"> • Signed purchase agreement with two collectors • Signed agreement with marketing service provider firm • Produced marketing strategy and materials to promote products. • Sent product samples to 2 new international buyers. • Register for a product registration mark for 4 new products. • Increased over \$100,000 in working capital. • Generated \$13,828 in purchases of fruits and tomato from farmers. • Generated 48,847 of sales of longan in syrup and dried products.
53. Puzzle Solution Co., Ltd.	<ul style="list-style-type: none"> • Conducted trainings on customs clearance, export requirements, and service packages to 10 new exporters. • Invested \$45,710 in equipment to improve logistics facilities. • Signed agreements/MoUs with 3 new clients. • Coordinated logistics arrangement valued over \$140,000 for Cambodian exporters and international buyers.
54. Generation One Co., Ltd.	<ul style="list-style-type: none"> • Conducted workshop with food processors to promote understanding of trading requirements • 5 local processors received services from Generation One. • Identified 7 potential buyers from the U.K., France, Belgium, Australia, and U.A.E for local processors. • Facilitated export of product samples from 3 local processors to the international buyers. • Organized marketing to promote products of the 5 local processors in 2 supermarkets. • Coordinated cashew nut export for K.C.C.V plantation to Taiwan.
55. Grove Fruit Growers Co., Ltd.	<ul style="list-style-type: none"> • Signed partnership agreements with two suppliers • Signed contract agreement with one international buyer • Signed contract agreements with two service providers for ground transportation • Signed contract agreement with one company for international shipment
56. Handcrafted Cashew Nut Stung Treng (HCST)	<ul style="list-style-type: none"> • Signed contract farming agreements with 57 cashew producers. • Conducted trainings for more than 100 cashew producers. • Registered 5 newly developed products with the Institute of Standards of Cambodia (ISC). • Provided over \$10,000 input credits for contracted farmers. • Applied for GMP and HACCP certifications. • Signed contract agreements with 10 local buyers (retailers and wholesalers). • Sent samples of the new products to 5 potential international buyers in South Korea, France, and the U.S.
57. Ample Agro Product Co., Ltd. (Ample)	<ul style="list-style-type: none"> • Developed packing materials for cashew nut, mango, and pineapple products, including packaging designs and materials • Developed marketing materials on the company's official website • Signed purchasing agreements with 59 cashew producers • Provided technical trainings for 239 farmers. • Signed sales agreements with 3 international buyers in the U.S., Canada, and France. • Submitted application for GMP and HACCP certifications. • Invested nearly \$180,000 on cashew nut processing equipment/machinery. • Generated over \$200,000 in farm-level sales and generated over \$240,000 firm-level sales.

Grantee	Accomplishments
58. SHE Agrocam Products Co., Ltd.	<ul style="list-style-type: none"> • Purchased over \$80,000 from local manufacturers. • Provided trainings/workshops for 30 agro-processing SMEs. • Signed purchasing agreements with 35 producers/ACs. • Assisted 9 agro-processing SMEs with product development. • Aided 5 agro-processors in products registration. • Provided export facilitation services to 3 agro-processing SMEs. • Promoted Cambodian SMEs' products and brands via tradeshow or exhibitions and marketing campaigns. • Linked local agro-processors to 3 potential international buyers. • Placed SHE Agrocam's repacked products at 8 local international markets. • Facilitated agro-processing SMEs to sell their products and achieved over \$50,000 in value. • Achieved more than \$100,000 in firm-level sales generated by SHE Agrocam
59. Accelerinno Tech Co., Ltd.	<ul style="list-style-type: none"> • Formed project team and trained 80 vendors on products branding and marketing. • Developed 100 pieces of marketing materials for 50 vendors. • Expanded operation from Phnom Penh to Kampot, opened a new office in Kampot, and hired 4 new staff. Registered 10 new vendors. • Vendors registered in Grocerdel platform generated \$85,481 in sales.
60. Peng Seng Doctor Water Co., Ltd.	<ul style="list-style-type: none"> • Completed initial workplan and provided list of potential buyers and partners • Signed contract agreements with five service providers to build Peng Seng's capacity to provide labeling and packaging services • Expanded business to 30 new clients who purchased Ecomizer and Biomizer water. • Generated \$67,457 of sales on Ecomizer and Biomizer water. • Generated \$17,867 of sales on Labeling and packaging services.
61. Kenko Shoku (Cambodia) Co., Ltd.	<ul style="list-style-type: none"> • Formed project team • Signed purchasing agreement with 4 ACs which consisted of 59 farmers in Kampong Chhnang, Siem Reap, Pursat, and Kampot. • Conducted trainings on greenhouse production practices to 64 farmers. • Installed 8 greenhouses equipped drip irrigation system at Kenko Shoku's farm in Siem Reap. • Identified 4 new prospective international buyers in Japan and Turkey. • Invested \$103,000 in improving Siem Reap warehouse facilities and equipment. • Generated \$45,149 in farm-level sales and generated \$56,149 in firm-level sales.
62. Ponlei Thamacheat	<ul style="list-style-type: none"> • Signed partnership agreements with two business partners • Registered 10 products with the Ministry of Industry, Science, Technology, and Innovation. • Conducted non-food chemical analysis to register for a product registration mark. • Developed new marketing materials including videos for social media marketing campaign. • Organized product launching event for buyers and consumers in Phnom Penh. • Made 2 contract farming agreements with suppliers. • Generated \$4,899 in farm-level sales and generated \$19,390 in firm-level sales.
63. Kokopon (Cambodia) Co., Ltd	<ul style="list-style-type: none"> • Attended a kick-off meeting to officially launch the grant. • Conducted trainings on digital literacy for 90 producers. • Improved existing Kokopon's web-based e-commerce new mobile app platforms. • Implemented marketing campaigns on local media and on social media advertisements. • Registered 300 new vendors to Kokopon e-commerce platform. • Generated over \$50,000 firm-level sales and digital solutions.

ANNEX E. SUMMARY OF SUCCESS STORIES

No	Success Stories	Year
1	Helping buyers and producers work together	FY18 Q1
2	Boosting ginger quality to meet processor demands	FY18 Q2
3	Helping horticulture sector buyers access finance	
4	Improving wholesale-supplier relationships	
5	Increasing buyers' capacity to respond to market demand	FY18 Q3
6	Promoting public-private dialogue in Cambodia's horticulture sector	
7	Strengthening resilience to climate change	
8	Empowering youth in Cambodia's horticulture sector	FY18 AR
9	AC supports improved production through new business venture	FY19 Q1
10	New horizons for Pursat oranges	
11	Bringing local produce to modern retail	FY19 Q2
12	Cashews for the community	
13	It takes a village	FY19 Q3
14	Legal, quality inputs and tailors services pay benefits	
15	Strengthening markets through collaboration across provinces	FY19 AR
16	Keeping farm workers healthy	FY20 Q1
17	MFI App addresses constraints	
18	Improving supply chain management through collaboration	FY20 Q2
19	Pilot program taps agronomy grads	
20	A new joint venture in fruit processing	FY20 Q3
21	Adopting new house nethouse technology	
22	Safe and organic products foster healthy living	FY20 AR
23	New financial products accelerate growth	FY21 Q1
24	Strengthening the horticulture sector through contract farming	
25	Exposure visit encourages market and product diversification	FY21 Q2
26	Facilitating global access to Cambodia's horticulture products	
27	Facilitating access to safe products builds a healthy community	FY21 Q3
28	A partnership launches a processor into international exports	
29	Packaging upgrades usher in market expansion opportunities	FY21 AR
30	A cashew processor's action plan unlocks expansion opportunity for many	FY22 Q1
31	Processing company advances by boosting skills and partnerships	
32	An agriculture cooperative advances skills to establish enterprise	FY22 Q2
33	Capacity building unlocks export opportunities for Cambodia's horticulture actors	

ANNEX F. REPORT INDEX

Type of report	Name	Submission Date
Quarterly Report	FTF Cambodia Harvest II Quarterly Performance Report (QPR): FY17Q3	July 30, 2017
	FTF Cambodia Harvest II QPR: FY18Q1	January 30, 2018
	FTF Cambodia Harvest II QPR: FY18Q2	April 30, 2018
	FTF Cambodia Harvest II QPR: FY18Q3	July 30, 2018
	FTF Cambodia Harvest II QPR: FY19Q1	January 30, 2019
	FTF Cambodia Harvest II QPR: FY19Q2	April 30, 2019
	FTF Cambodia Harvest II QPR: FY19Q3	July 30, 2019
	FTF Cambodia Harvest II QPR: FY20Q1	January 30, 2020
	FTF Cambodia Harvest II QPR: FY20Q2	April 29, 2020
	FTF Cambodia Harvest II QPR: FY20Q3	July 14, 2020
	FTF Cambodia Harvest II QPR: FY21Q1	January 29, 2021
	FTF Cambodia Harvest II QPR: FY21Q2	April 29, 2021
	FTF Cambodia Harvest II QPR: FY21Q3	July 19, 2021
	FTF Cambodia Harvest II QPR: FY22Q1	January 30, 2022
	FTF Cambodia Harvest II QPR: FY22Q2	April 29, 2022
Annual Report	FTF Cambodia Harvest II FY17 Annual Report	October 30, 2017
	FTF Cambodia Harvest II FY18 Annual Report	October 30, 2018
	FTF Cambodia Harvest II FY19 Annual Report	October 30, 2019
	FTF Cambodia Harvest II FY20 Annual Report	October 26, 2020
	FTF Cambodia Harvest II FY21 Annual Report	October 27, 2021
Consultant and Policy Report	Agricultural Policy Assessment	July 2017
	Gender Action Plan	October 18, 2017
	Improved business skills of Agro-input retailers	May 05, 2018
	Technical Capacity to Cashew Suppliers	March 27, 2018
	Agricultural Subsector Plans 2030	April 10, 2019
	Situation Analysis Cambodian Cashew Sector	December 30, 2019
	Draft Prakas on Dispute Resolution Procedure	July 2019
	Rapid Assessment of Wholesaler Fruit and Vegetable Market	January 2021
	Plant Protection and Quarantine Strategic Development Plan (2022-2027)	March 2021
	Value Chain Strategic Plan for Cambodia Export Enhancement of Durian	March 31, 2021
	Value Chain Strategic Plan for Cambodia Export Enhancement of Longan	March 31, 2021
	Value Chain Strategic Plan for Cambodia Export Enhancement of Mango	March 31, 2021
	Value Chain Strategic Plan for Cambodia Export Enhancement of Pepper	March 31, 2021
	Impact Narrative Report	May 2022

ANNEX G. CONSOLIDATED FINANCIAL REPORT (SUBMITTED SEPARATELY)